



MICHIGAN DEPARTMENT OF TRANSPORTATION

**State Long-Range Transportation Plan
2005-2030**

**Intercity
Passenger
Technical Report**

*Prepared by
The Michigan Department
of Transportation
November 8, 2006*

With assistance from



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MI Transportation

MICHIGAN LONG RANGE TRANSPORTATION PLAN

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Executive Summary

This technical report is one of 17 technical reports developed to support *MI Transportation Plan*. Each report serves (1) as a resource for information about its substantive focus area and (2) as a component of the integrated transportation plan. The body of the report includes information compiled in the spring and summer of 2006 summarizing key policy, planning, and operational information relevant to understanding the current status of Intercity Passenger Transportation in Michigan and potential emerging transportation issues and future directions. The Integration section explores how the information contained in the body of this report contributes to a cohesive vision for a transportation system optimal to support Michigan's economic vitality in the long-term.

Status of Intercity Passenger Services in Michigan:

For the state of Michigan, intercity passenger services include both intercity bus and passenger rail. The primary carriers are the National Railroad Passenger Corporation (Amtrak), Greyhound Lines, Inc., and Indian Trails Inc. The Upper Peninsula and most of the Northern Lower Peninsula are limited to only intercity passenger bus service, while the Southern portions of Michigan are served by both train and bus. The service available is a function of schedules/routes determined by the individual carriers plus state-supported routes as determined by the Michigan Department of Transportation (MDOT).

MDOT's role in intercity passenger services is to support and supplement the services provided by the individual carriers to help maintain public intercity passenger transportation as a viable mode of travel in Michigan. The state has a three-pronged approach to intercity passenger service. First, MDOT uses state and/or federal funds to contract with the carriers to provide route service that would not otherwise exist, i.e., would not be provided by the carrier absent a state subsidy. Second, MDOT provides state and/or federal funds to enhance the intercity passenger infrastructure, such as funding for construction of intercity passenger terminals, motor coaches, and track and technology improvements. These investments help enhance the transportation experience for intercity passengers and help reduce costs for the carriers. Third, MDOT works with the carriers in an effort to maintain and enhance intercity passenger service in Michigan, including connectivity with other passenger modes.

As for intercity passenger rail service, Amtrak offers intercity passenger rail services along three major corridors in Michigan: the Pere Marquette (Grand Rapids-Chicago), the Blue Water (Port Huron-Chicago) and the Wolverine (Pontiac-Detroit-Chicago) corridors. There are 22 stations in Michigan that provide rail passengers the opportunity to access passenger train transportation along the three routes. The Pontiac-Detroit-Chicago corridor is one of the original federally-designated High-Speed Corridors. The corridor currently includes the only segment of track outside the Northeast Corridor that has the technical ability to travel to 110 miles per hour (mph) and currently operates at 95 mph. While passenger rail ridership began declining in 1998, there was resurgence in intercity passenger rail ridership statewide and nationally in 2003. Increased local marketing, community involvement/awareness, and the

increasing cost of gasoline have contributed to these ridership increases. As a result, statewide ridership and revenue for the Michigan intercity passenger rail services reached an all-time high in 2005.

Intercity passenger bus service is provided by two principal intercity bus carriers operating in Michigan: Greyhound Lines, Inc. and Indian Trails, Inc. Greyhound Lines and Indian Trails provide daily regular-route intercity bus service to 127 Michigan communities. Subsidized bus service in Michigan has emerged in response to carrier service reductions. As carrier decisions are made, MDOT reviews the affected routes and makes a determination on whether or not to provide a subsidy for the service, based on available financial resources to sustain the service. Currently, all intercity bus service in the Upper Peninsula and Northern Lower Peninsula is subsidized. The funding that MDOT provides to the intercity carriers for the subsidized routes takes the form of a revenue guarantee.

There are 27 intercity bus passenger facilities, of which MDOT owns four. Local governments and local transit agencies own and/or operate 21 transportation facilities; Indian Trails owns and operates two transportation facilities. Also, 18 passenger facilities are categorized as intermodal facilities, serving more than one transportation mode.

Optimizing the Intercity Passenger System in the Future:

An optimal intercity passenger system depends on increased coordination between intercity carriers, both within a mode and between modes (between bus and train and between bus and air). There also needs to be increased coordination between intercity carriers and local transit providers. The goal is to have a seamless system of public passenger transportation through Michigan that connects to the national network.

Coordination needs to be a win-win situation. First, it needs to work for the customer. It needs to provide a convenient, comfortable, and cost-effective travel option. Second, coordination needs to work for the community. Third, coordination needs to make sense to the carrier. It must be fiscally logical and meet corporate objectives. Additionally, coordination can also mean the carriers working together to develop a network that optimizes the private and public resources in meeting passenger needs. Further, an adequate, sustained, and predictable level of funding is critical to achieving a balanced transportation system for Michigan residents and visitors. This includes a sufficient amount of federal funds with the state and local government having the ability to match these funds.

A balanced transportation system is envisioned as one that accommodates the safe and efficient flow of people and goods using an integrated system of highways, airports and air service, rail stations and rail service, intercity bus stations and intercity bus service, and transit services. Rail service would consist of passenger rail and rail freight operating at conventional speeds and higher speeds on selected routes.

Integration with the Statewide Plan:

The intercity passenger transportation services programs and assets described in this *Intercity Passenger Technical Report* provide the building blocks for understanding the integral role of

intercity passenger transportation in *MI Transportation Plan*. This report highlights both the need for integration of intercity operations and services, as well as the integration of intercity passenger services with transit and other modes and services.

This *Intercity Passenger Technical Report* has linkages to the *Safety Technical Report*, the *Highway and Bridge Technical Report*, the *Transit Technical Report*, as well as the *Land Use Technical Report* and the *Economic Outlook Technical Report* and is referenced in the integration sections of those and other technical reports. Integrating intercity passenger services as part of a multi-modal vision entails leveraging the assets and services described in this report with other system assets to meet the changing needs of Michigan's system user segments. Integration of intercity services may remove barriers to economic participation by Michigan's travel segments. It may also trigger valuable economic activity by connecting workers, consumers, and businesses to key activities and markets supporting Michigan's economic vitality.

Chapter 1. Introduction

This technical report is one of 17 technical reports developed to support *MI Transportation Plan*. Each report serves (1) as a resource for information about its substantive focus area and (2) as a component of the integrated transportation plan. The body of the report includes information compiled in 2006 summarizing key policy, planning, and operational information relevant to understanding the current status of intercity passenger transportation in Michigan, potential emerging transportation issues, and future directions. The Integration section explores how the information contained in this report contributes to a cohesive vision for a transportation system optimal to support Michigan's economic vitality in the long-term.

The information in this technical report is further integrated with the other 16 technical reports in the *Integration Technical Report*, carrying forward into the *Conditions and Performance Technical Report* and the *Corridors and Borders Report*. The technical reports can be categorized into two types: (1) reports about transportation supply (assets, infrastructure, services, and resources) and (2) reports about transportation demand (users, markets, travel segments, and industries utilizing freight). This technical report presents an overview of both intercity passenger bus and rail services in Michigan. It also discusses ongoing planning efforts for these services, goals, and performance measures and concludes with a discussion of issues related to the integration of all travel modes.

Chapter 2. Status of Intercity Passenger Service

Intercity passenger services include both intercity bus and passenger rail. The primary carriers are the National Railroad Passenger Corporation (Amtrak), Greyhound Lines, Inc. and Indian Trails Inc. The intercity passenger network is the combined results of: 1) the schedules/routes determined and funded by these three carriers and 2) schedules and routes determined and funded by Michigan Department of Transportation (MDOT).

State departments of transportation are involved in intercity passenger services as part of their objective to provide for a balanced transportation system for residents, visitors and businesses. Each mode has its niche in a statewide transportation system offering choices to the user and contributing to the provision of a safe, convenient, environmentally-friendly, energy-efficient, and cost-effective transportation system.

MDOT's role in intercity passenger services is to support and supplement the services provided by the individual carriers to help maintain public intercity passenger transportation as a viable mode of travel in Michigan. The state has a three-pronged approach to intercity passenger service. First, MDOT uses state and/or federal funds to contract with carriers to provide route service that would not otherwise exist, i.e., would not be provided by the carrier absent a state subsidy. Second, MDOT provides state and/or federal funds to enhance the intercity passenger infrastructure, such as construction of intercity passenger terminals, purchase of intercity motor coaches leased at reduced rates to the carriers and track and technology improvements. These investments help enhance the transportation experience for intercity passengers and help

reduce costs for the carriers. Third, MDOT works with the carriers in an effort to enhance intercity passenger service Michigan, including connectivity with other passenger modes.

While MDOT is actively involved in supporting intercity passenger services in Michigan, its ability to guide and plan for intercity passenger services can at times be limited for several reasons. An understanding of these reasons also provides a greater understanding of the nature of intercity passenger transportation in Michigan. First, each carrier has its own corporate goals, strategies and approach to meeting customer demands and preferences that may or may not be consistent with MDOT's goals for intercity passenger service. Second, the funds available to MDOT to contract for intercity passenger service are finite and the cost of state-subsidized service are dependent on market forces MDOT cannot control. For example, MDOT can only "purchase" services that the carriers are willing and able to provide at costs the State is willing and able to pay.

The third factor that limits MDOT's ability to guide and define the intercity passenger network in Michigan is the relationship of these services to the national network. Like the interstate highway system, both modes provide for intercity travel *within* Michigan, but a primary goal is to connect to national networks to provide for travel *throughout the country*. For intercity bus, the subsidized routes in the Upper Peninsula and Northern Lower Peninsula are designed to connect to unsubsidized intercity bus routes at several points within southern Michigan; with the unsubsidized routes connecting to the national intercity bus network in Chicago, with some connections also in Detroit. For passenger rail, the subsidized and unsubsidized services are both within southern Michigan and are designed to connect to Amtrak's national network in Chicago. Optimizing the system in Michigan must be done in context with the national network.

The current state of rail passenger and intercity bus service is described below.

2.1 Passenger Rail Service

Passenger rails service in Michigan is provided by the National Railroad Passenger Corporation (Amtrak) which was established by Congress in 1970 with passage of the National Railway Passenger Service Act of 1970. Amtrak operates a nationwide rail network, serving more than 500 destinations in 46 states on about 21,000 miles of routes. It is both a business and a public enterprise that relies on funding from Congress.

2.1.1 MDOT's Passenger Rail Program

Michigan is one of thirteen states that contract with Amtrak for the operation of trains that supplement the national Amtrak network by extending the reach of passenger rail services or increasing frequencies on national routes.

Michigan's Transportation Commission has adopted policy (See **Section 2.5.5.1**) that acknowledges that intercity rail passenger service, including high speed rail, should be an integral part of the transportation system that meets transportation needs now and in the future. MDOT recognizes that intercity passenger rail is most effective in high volume travel corridors and that its best performance is achieved with high ridership.

Through its investments in operating and capital assistance to enhance Amtrak's nationwide system, MDOT endeavors to:

- Provide passenger rail service in Michigan's highest travel corridors which includes connections to the largest population centers, employment centers, and university communities.
- Meet customers' long-distance travel needs including safe and accessible equipment and terminals.
- Increase coordination and build partnerships of various modes to balance the overall transportation system.
- Fund capital improvements to reduce rail congestion and support the development of the high speed rail corridor which allows for increased speeds and shorter more reliable travel times.

MDOT's activities include providing an operating subsidy for rail passenger services to supplement intercity passenger rail services Amtrak has been able to provide, to date, without state assistance. Operating assistance helps provide for intercity passenger rail service in some of Michigan's highest travel corridors and to some of Michigan's largest population centers, employment centers, and university communities including Michigan's capital city.

MDOT is also involved in promoting high speed rail in Michigan as a method to reduce intercity passenger rail travel times which will ultimately be comparable to, or shorter than, auto travel. High speed rail provides travel options that conserve energy, reduce pollution, and reduce congestion. Michigan's efforts are part of a national program, with limited federal funding, to establish a national high speed rail network.

Finally, Michigan is also involved in the Midwest Regional Rail Initiative (MWRRI), (as further described in **Section 2.3.1.1**) in an effort to ensure Michigan is investing in an intercity passenger rail system that connects to an equally developed system beyond its borders. This is especially critical in connecting to the Midwest's intercity passenger rail system hub in Chicago. One of the biggest obstacles to improving Michigan's intercity passenger rail service is congestion between Porter, Indiana and Chicago, Illinois which causes delays within Michigan. The MWRRI will help address issues outside of Michigan's borders that can improve service within its borders.

2.1.2 Amtrak's Passenger Rail Service in Michigan

Amtrak initiated service in Michigan in May 1971 as part of its nationwide system. Service began in the Detroit and Chicago corridor and was extended to Pontiac on May 5, 1994. The Blue Water service (Port Huron-Chicago) was initiated on September 15, 1974 and became the International service (Toronto-Port Huron-Chicago) on October 31, 1982. On April 25, 2004, service to Toronto was discontinued and the International service transitioned back into the Blue Water service. Service between Grand Rapids and Chicago began on August 5, 1984.

Today, Amtrak offers intercity passenger rail services along these same three corridors in Michigan as shown in **Figure 1**. These services are the Pere Marquette (Grand Rapids-Chicago),

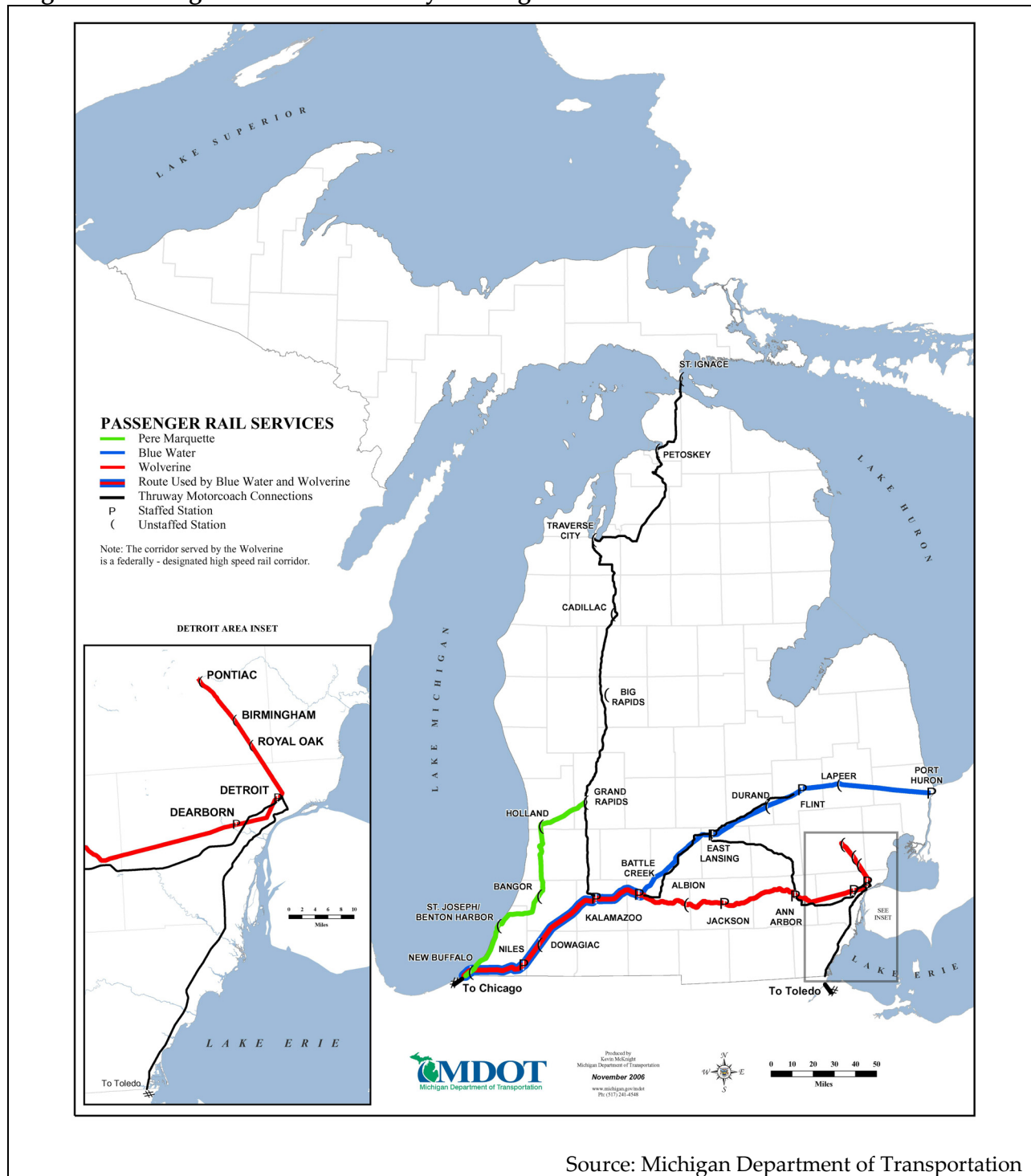
the Blue Water (Port Huron-Chicago) and the Wolverine (Pontiac-Detroit-Chicago). The Pontiac-Detroit-Chicago corridor is one of the original federally designated High-Speed Corridors. The corridor currently includes the only segment of track outside the Northeast Corridor that has the technical ability to travel to 110 miles per hour (mph) and currently operates at 95 mph. This segment of track extends over 45 miles of Amtrak ownership and is located west of Kalamazoo. These three passenger rail corridors serve 22 station communities and consist of 521 route miles in Michigan. The Pere Marquette and Blue Water offer one round trip per day and the Wolverine offers three round trips daily.

Unlike the Wolverine service, which is part of Amtrak's national system, the Pere Marquette and the Blue Water services are operated by Amtrak at the request of the state of Michigan. The state operating subsidy for these services since Fiscal Year (FY) 2004 has been \$7.1 million per year. The price of operating each service is based on the allocation of direct costs, i.e., costs that are associated with train operation and service. These costs include shared route costs to the host (freight) railroads, shared capital costs for maintenance on the Amtrak owned infrastructure, fuel, labor, equipment maintenance, reservations, stations, etc. The operating subsidy is 100 percent of the projected route operating loss. This route operating loss is calculated as total operating revenue minus the total direct operating costs.

Between October 1, 2000 and September 30, 2005, the Blue Water (Port Huron-Chicago) transported 483,726 passengers, operated 1.2 million train-miles and generated \$12.9 million in revenue with an average cost to the state of \$41 per passenger. For this same period, the Pere Marquette (Grand Rapids – Chicago) transported 376,593 passengers, operated 642,400 train-miles and generated \$9.1 million in revenue with an average cost to the state of \$30 per passenger. On the two state-supported routes combined, Amtrak transported 860,319 passengers, operated 1.8 million train-miles, and generated over \$21.9 million in revenue with an average cost to the state of \$36 per passenger and \$17.32 per train-mile.

Amtrak offers rail passengers a single-ticketed, dedicated bus connection from East Lansing, Ann Arbor, Dearborn, and Detroit. These thruway bus connections travel to Toledo, Ohio, and connect to east coast trains. Indian Trails (bus operator) and Amtrak also coordinate thruway bus service between Flint, East Lansing and Battle Creek and also from St. Ignace, Traverse City, and Grand Rapids to Kalamazoo with connections to trains along the Wolverine service.

Figure 1: Michigan Statewide Intercity Passenger Rail Routes and Stations



2.1.3 Rail Passenger Ridership and Passenger Characteristics

While passenger rail ridership began declining in Fiscal Year 1998 (FY 1998), Fiscal Year 2003 (FY 2003) marked resurgence in intercity passenger rail ridership statewide and nationally. Increased local marketing, community involvement/awareness, and the increasing cost of gasoline have contributed to these ridership increases. Statewide ridership and revenue for the Michigan intercity passenger rail services reached an all-time high in FY 2005. Statewide figures show FY 2005 exceeding FY 2004 by over 12 percent in ridership and over 16 percent in revenues. The individual routes have equally excelled. FY 2005 marked the best year in ridership and revenue for the Pere Marquette, while the Blue Water service experienced its second year of consecutive growth and highest year of ridership in six years. In FY 2005, the Wolverine service earned the highest revenue in its history and ridership numbers came in second in its history and highest since FY 1997. Ridership and revenue figures for all service routes are provided in **Figures 2 and 3** (see **Appendix, pages A-2 and A-3**).

Figure 2: Michigan Statewide Intercity Passenger Rail Service – Ridership (FY 1995-2005)

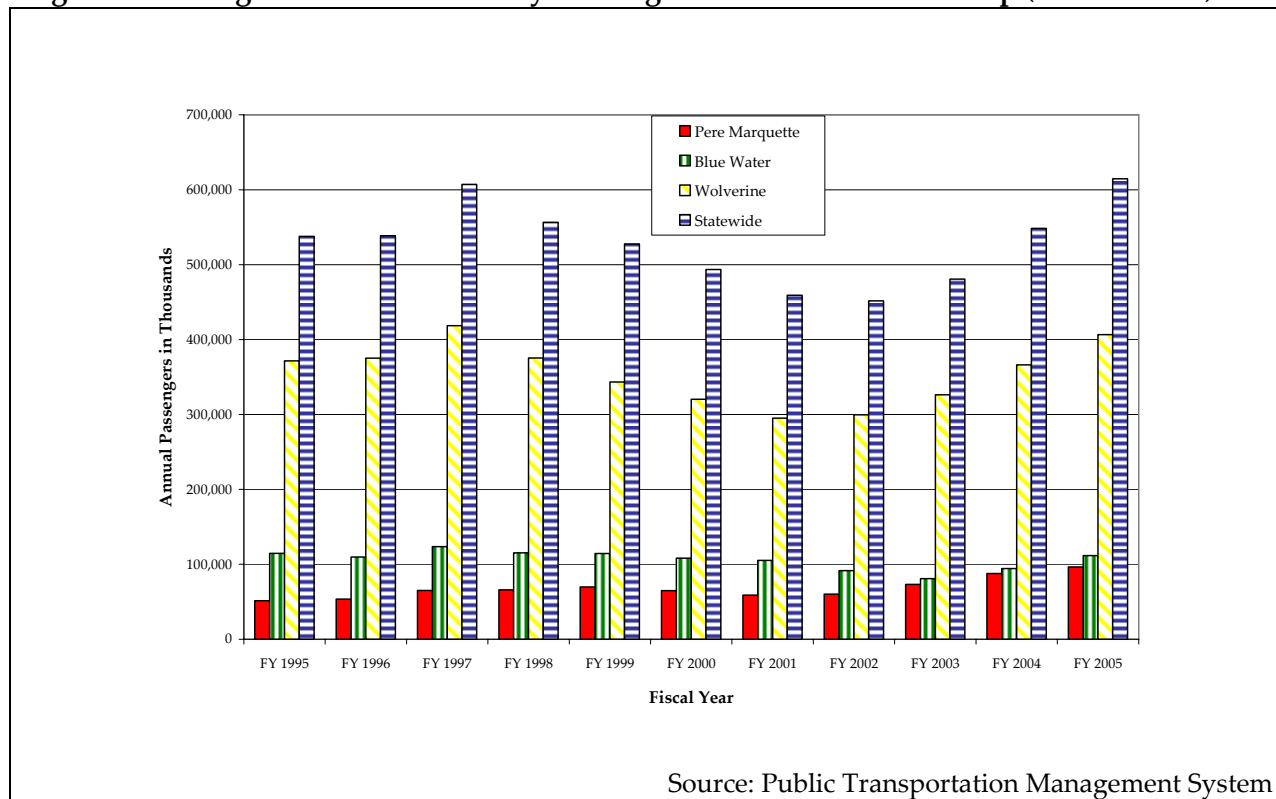
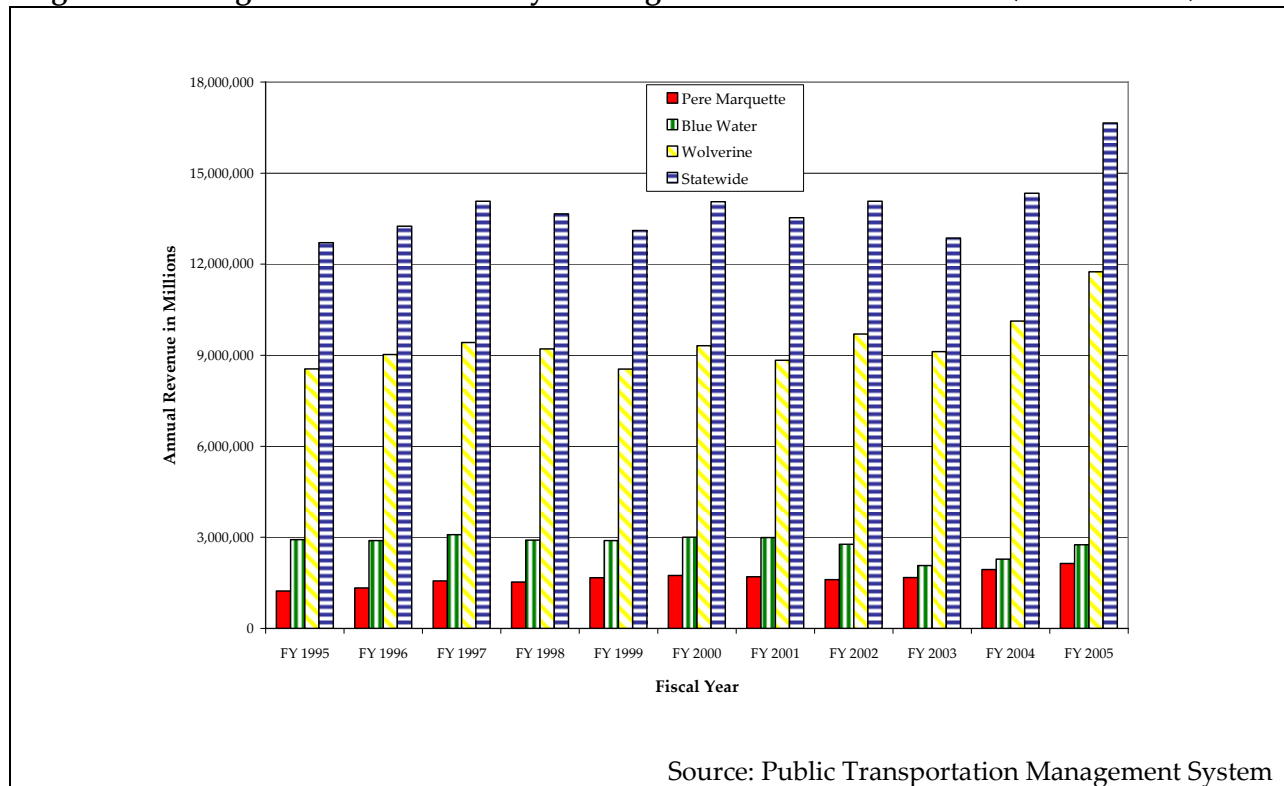


Figure 3: Michigan Statewide Intercity Passenger Rail Service – Revenue (FY 1995-2005)

According to the *Intercity Rail and Bus Passenger Study* completed for MDOT in November 2002, nearly two-thirds (63.2%) of intercity passenger rail riders are women; this is fairly consistent regardless of age group. The median household income is in the \$50,000-74,000 range. Nearly seven of every 10 riders come from households owning two or more vehicles, less than one in 10 from households with no vehicles. Most riders (94%) have another option to use in making the trip. Convenience is the primary reason for selecting rail to make the trip, followed by “don’t like to drive,” and cost.

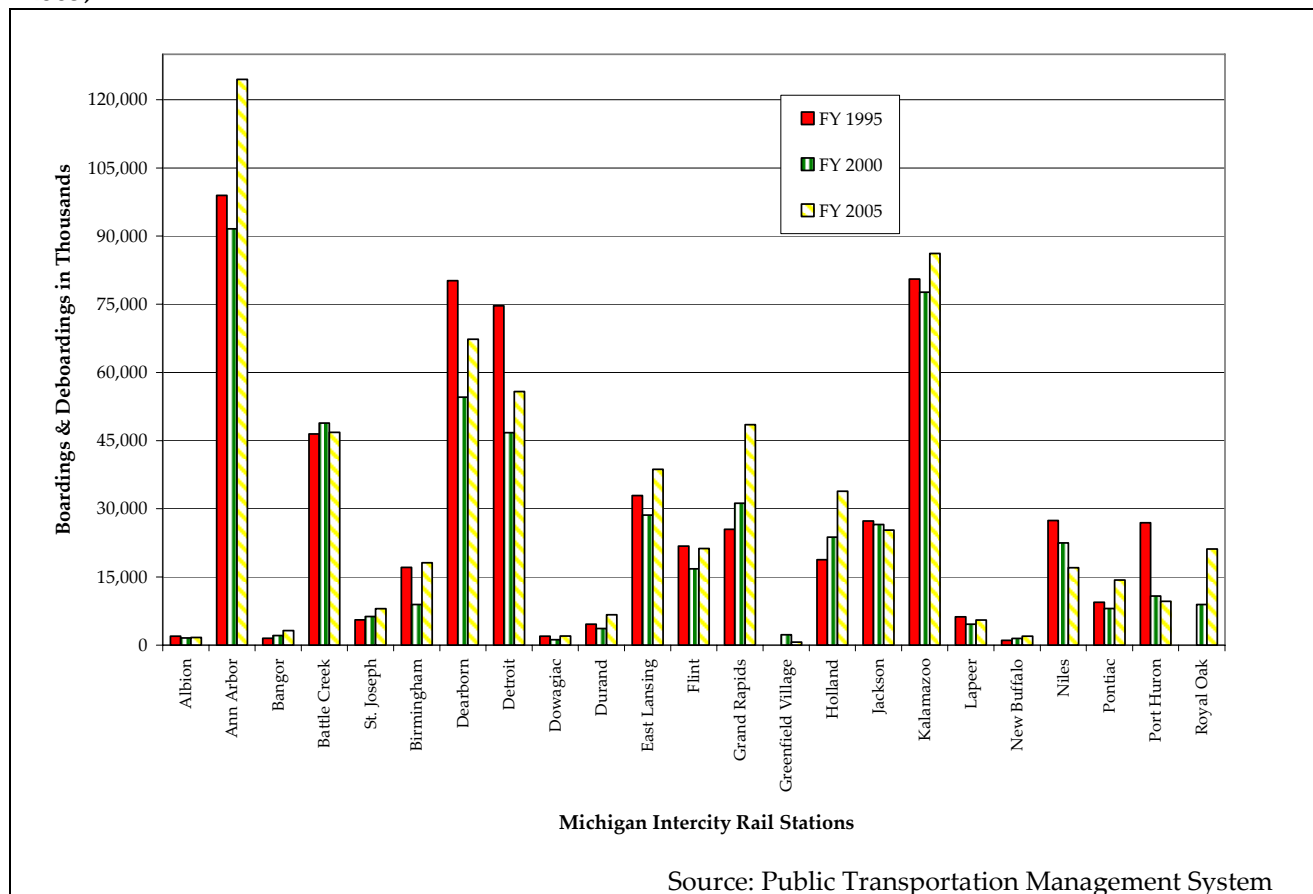
According to the same study, the most frequent trip purpose is to visit family or friends (30%), followed by shopping (19%), vacation (14%), and business (10%). Over 80 percent use a vehicle to access the station with half being dropped off at the station and the other half parking their vehicle at the station. About 2.4 percent use transit to access the station. If the train was not available, 40 percent of riders would drive, while 23 percent would fly. It is important to note that this survey time frame, December, may influence trip purpose and not reflect the annual distribution of trip purpose. (Source: *Intercity Rail and Bus Passenger Study*, prepared for the Michigan Department of Transportation by the A. Alfred Taubman College of Architecture and Urban Planning, The University of Michigan, November 6, 2002).

2.1.4 Passenger Rail Stations

Michigan's 22 stations provide rail passengers the opportunity to access passenger train transportation along the three routes. The amenities offered by these station stops vary from platforms and basic shelters to historic facilities. Some of the stations are also intermodal terminals, providing connections to local transit and/or intercity bus. Several stations have been renovated over the years and several more are in various planning stages for possible renovation and/or replacement. The Niles station renovation was completed in October of 2003 and the Bangor Station renovation was completed in 2005. The Kalamazoo station renovation and expansion is currently underway. New stations are planned for Detroit, Dearborn, and Grand Rapids and a study to develop a multi-modal facility at the Jackson station will be completed in 2006. Currently, the Ann Arbor train station serves the most passengers in the state followed by Kalamazoo, Dearborn, Detroit, and Grand Rapids.

Figure 4 summarizes station use. Station use is measured by counting each passenger getting on and off the train. This count is called "Station Activity" and is available through MDOT's Transportation Management System. The Greenfield Village Station shown in **Figure 4** was discontinued as a scheduled Amtrak stop in April 2006, but continues to be a destination for excursion trains.

Figure 4: Michigan Statewide Intercity Passenger Rail Service – Station Activity (FY 1995-2005)



2.2 Intercity Bus Service

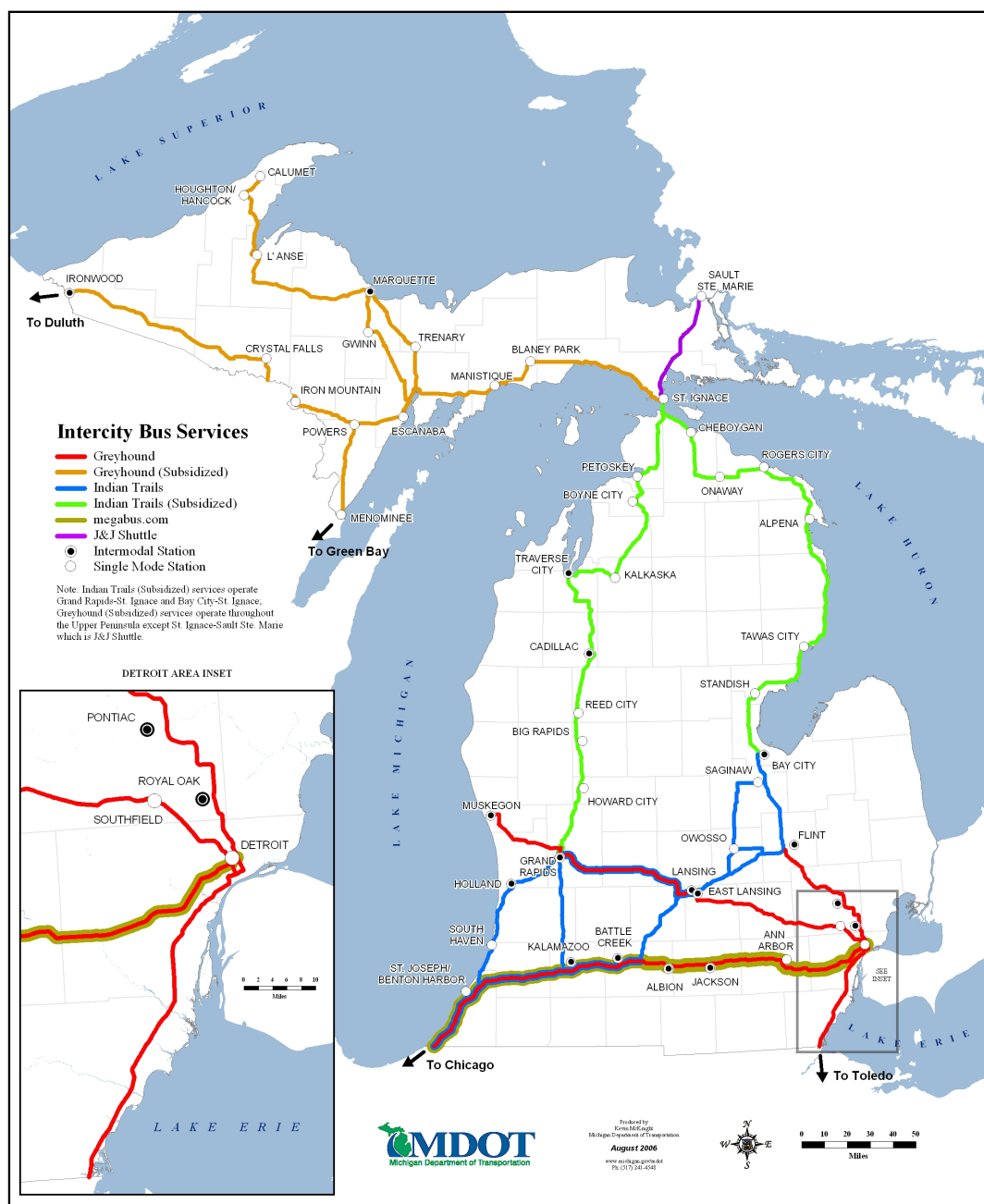
The two principal intercity bus carriers operating in Michigan are Greyhound Lines, Inc. and Indian Trails, Inc. Greyhound Lines and Indian Trails provide daily, regular route intercity bus service to 127 Michigan communities. Founded in 1914, Greyhound Lines, Inc. is the largest provider of intercity bus transportation in the United States, serving more than 3,100 destinations with 16,000 daily departures across North America. Indian Trails, Inc. is a Michigan-based firm that has been providing intercity bus services in Michigan and adjacent states since 1910. They operate some 54 coaches from three modern facilities in Owosso, Kalamazoo, and Metro Detroit. In addition to being an intercity carrier, Indian Trails is one of the leading charter coach operators in the country.

These two carriers, through a combination of subsidized and unsubsidized services, provide the majority of the intercity bus service in Michigan. The subsidized and unsubsidized service works together to provide the intercity bus network in Michigan. For example, Greyhound Lines provides subsidized service in Michigan's Upper Peninsula which directly connects with Greyhound's national network in Duluth, Minnesota and Green Bay, Wisconsin. The subsidized Upper Peninsula service connects to Indian Trails' at St. Ignace. From St. Ignace, Indian Trails' operates subsidized services in the Northern Lower Peninsula which serves various communities along two northern Michigan corridors and that eventually connects with unsubsidized intercity bus routes provided by both carriers at various locations in southern Michigan. The connections between the subsidized and unsubsidized services in southern Michigan provide for connections to Greyhound's national network in Chicago, Illinois and some in Detroit.

In addition to Greyhound Lines and Indian Trails, J and J Shuttle operates on-demand response service between St. Ignace and Sault Ste Marie, Michigan, to connect Sault Ste Marie with the intercity bus routes that originate in St. Ignace. Megabus.com, a subsidiary of Coach USA, began operating daily non-stop express intercity bus service between Detroit and Chicago in April 2006.

Figure 5 shows intercity bus service in Michigan as of August 2006. *(Editor's note: Greyhound Lines' contract for the subsidized services in the Upper Peninsula expires in January 2007 and Greyhound Lines has informed MDOT that they will not extend the contract. MDOT is currently working with Indian Trails to provide state subsidized service in the Upper Peninsula. With this change in carriers, routes and schedules are subject to some modification.)*

Figure 5: Intercity Bus Service in Michigan, August 2006



Source: Michigan Department of Transportation

2.2.1 MDOT's Intercity Bus Program

The purpose of MDOT's intercity bus program is to enhance intercity bus travel for the citizens of Michigan by providing capital and operating assistance to private intercity bus carriers. Through this financial assistance and through ongoing communications with the intercity bus carriers, MDOT endeavors to:

- Meet customer long-distance travel needs;
- Provide safe, accessible, up-to-date vehicles and terminals for the traveling public;
- Provide connection between communities as well as with the national bus system;
- Increase coordination with local transit agencies to improve intermodal ridership;
- Build partnerships with all other transportation modes; and
- Prevent community isolation.

MDOT financial assistance is provided in the form of capital assistance, terminal assistance and operating assistance (subsidies).

2.2.1.1 Capital Assistance

MDOT purchases intercity motor coaches and leases them to Indian Trails and Greyhound as a way to ensure Michigan riders have safe, accessible and up-to-date vehicles and to help defray the carriers' operating costs. Carriers must have operated under a Certificate of Authority in accordance with Public Act 432 of 1982, as amended, for a period of two years to apply for a motor coach from the capital program.

Full-size intercity motor coaches that are purchased as part of this program are eligible for replacement when six years or 450,000 miles have been accumulated and are restricted to regular-route service. MDOT invests between \$2.0 and \$3.0 million a year in state funds toward the purchase of new intercity motor coaches that are leased to the carriers at a rate of \$1,000.00 a year per motor coach.

2.2.1.2 Terminal Assistance

MDOT also invests in intercity terminals/shelters that enhance the intercity bus travel experience by providing consistent, safe points of transfer between intercity bus routes and between intercity bus and other passenger modes.

Other capital and service development funding requests are also considered by MDOT. Items such as computers, marketing funds, and service studies are considered as the need arises and supported as funds are available.

2.2.1.3 Operating Assistance/Subsidized Service

Operating assistance (subsidies) for intercity bus service is considered as a last resort to maintain existing service or to expand service that can become operationally self-sufficient.

Subsidized bus service in Michigan has emerged in response to carrier service reductions. As carrier decisions are made, MDOT reviews the affected routes and makes a determination on whether or not to provide a subsidy for the service based on available financial resources to initiate and sustain the service.

The carrier actions described below and the associated MDOT response demonstrates how subsidized service has evolved over time.

- In 1990, a work stoppage forced Greyhound Lines, Inc. to discontinue intercity bus service between Grand Rapids and Traverse City. MDOT contracted with Indian Trails, Inc. for the operation of the intercity bus service between Bay City and Alpena and between Grand Rapids and Petoskey.
- In 1993, Greyhound Lines discontinued service between Clare and Mackinaw City. MDOT extended existing state subsidized intercity bus service, between Grand Rapids and Petoskey, north to St. Ignace. Then, in 1994, MDOT extended the state subsidized intercity bus service, between Bay City and Alpena, north from Alpena to St. Ignace.
- In 1995, Greyhound Lines discontinued service between Traverse City and St. Ignace. MDOT did not add any subsidized service.
- In 1996, regional carrier White Pine/North Star discontinued intercity bus service in the Upper Peninsula: the St. Ignace to Duluth, Minnesota route and the Calumet to Milwaukee, Wisconsin route. In 1997, MDOT provided buses to Superior Transportation to revive intercity bus service. However, in 1999, Superior Transportation discontinued intercity bus service in the Upper Peninsula. MDOT contracted with Greyhound Lines for the operation of intercity bus service in the Upper Peninsula.
- In 2003, Greyhound Lines discontinued service between Bay City and Traverse City via Midland/Mt. Pleasant and Lake City/Cadillac, severing service to three communities. MDOT did not add any subsidized service.
- In 2004, Greyhound Lines discontinued service between Detroit and Traverse City via Ann Arbor/Jackson and Grayling/Kalkaska, severing service to seven communities. MDOT did not add any subsidized service. In addition, in June 2004, Greyhound started a nationwide network transformation in response to the downturn in business and significant increases in security, fuel, and insurance costs following the terrorist attacks on September 11, 2001. This nationwide effort will be completed in the spring of 2006 and will result in the elimination of service to roughly 1,000 communities nationwide. As part of this nationwide network review, in 2005 Greyhound Lines ended service to several Michigan communities and realigned its service between Detroit and Chicago. The changes were made to offer faster service with fewer stops in the major travel corridors. To date, MDOT has not added subsidized service in response to the Greyhound restructuring.

Currently, all regular route intercity bus service in the Upper Peninsula and Northern Lower Peninsula is subsidized. The funding that MDOT provides to the intercity carriers for subsidized routes takes the form of a revenue guarantee. The carrier bids a cost per mile rate, and MDOT provides that rate minus any passenger revenue earned on the route. The presence of two intercity bus carriers in the state, as well as the potential for bids from qualified carriers throughout the country, adds a competitive nature to the bid process.

Based on current contract rates, MDOT invested about \$1.5 million in state and federal funds for intercity bus operating subsidies in FY 2005. The subsidy does not include any capital costs of providing the service, which are borne by the carriers with some capital assistance from MDOT.

2.2.2 Greyhound Lines Service in Michigan

Greyhound Lines operates daily intercity bus service along the designated transportation corridors of I-94, I-75, and I-96. The following Greyhound service is operated by Greyhound independent of state operating subsidies:

- Service along the I-94 corridor between Detroit, Michigan and Chicago, Illinois;
- Service along the I-96 corridor between Detroit and Muskegon; and
- Service along the I-75 corridor between the Ohio/Michigan state line to Detroit and Flint;

The following Greyhound service operates with subsidies from MDOT:

- Service along the US-2 and US-2/US-41 corridor between St. Ignace and Ironwood (Duluth);
- Service along the US-41/M-28 corridor between Calumet and Menominee (Milwaukee, Wisconsin); and
- Service along the M-28/US-41 corridor and the US-41/M-35 corridor between Marquette and Menominee (Green Bay, Wisconsin).

2.2.3 Indian Trails Service in Michigan

Indian Trails operates scheduled intercity bus service along the designated transportation corridors of I-94, I-75, I-69, and US-131. The following Indian Trails service does not receive operating subsidies from MDOT:

- Service along the I-94 corridor between Battle Creek and Chicago, Illinois;
- Service along the I-75 corridor between Flint and Bay City;
- Service along the I-69 corridor between Flint and the I-94 /I-69 interchange, diverting onto M-78 to Battle Creek;
- Service along the US-131 corridor between Grand Rapids and Kalamazoo;
- Service along the I-196/US-31/I-94 corridor between Grand Rapids and Benton Harbor; and

- Service along the M-52/M-46 corridor between Owosso and Saginaw and the I-69/M-71 corridor between Durand and Owosso.

The following Indian Trails service operates with subsidies from MDOT:

- Subsidized service along the I-75/US-23 corridor between Bay City and St. Ignace, diverting onto M-68 and M-33; and
- Subsidized service along the US-131 corridor between Grand Rapids and St. Ignace, diverting onto M-113, M-72, and M-75.

2.2.4 Other Bus Service in Michigan

J and J Shuttle Service:

- Demand response service along the I-75 corridor between Sault Ste. Marie, Michigan and St. Ignace, Michigan.

Megabus.com Service in Michigan:

- Express service along I-94 corridor between Detroit, Michigan and Chicago, Illinois.

2.2.5 Intercity Bus Ridership

Between October 1, 2000, and September 30, 2005, Greyhound Lines transported 285,752 passengers, operating in excess of 4.4 million bus miles over the three Upper Peninsula routes. The average cost to the state, in terms of operating subsidy only, is \$26 per passenger carried. These routes generated over \$4.5 million in revenue for Greyhound. For this same period, Indian Trails transported 195,596 passengers, operating in excess of 2.3 million bus miles over the two Lower Peninsula routes. The average cost to the state was \$9 per passenger carried, when taking into consideration the operating subsidy only. These routes generated over \$3.6 million in revenue for Indian Trails. Overall, the five routes carried 481,348 passengers in excess of 6.7 million miles, at an operating subsidy level of \$1.36 per mile operated. Subsidized ridership and miles for the five state-supported routes over this five-year period are provided in **Figures 6 and 7**.

As **Figure 6** shows, between FY 2000 and FY 2005, the Bay City to St. Ignace route retained a fairly steady passenger count and the Calumet to Milwaukee route showed increasing ridership. The other three routes experienced ridership dips in FY 2002, 2003 or 2004. FY 2005 indicates passenger counts are beginning to recover, except in the Marquette to Green Bay route.

MDOT does not have comprehensive ridership data for the unsubsidized routes in Michigan, since this data is not reported to MDOT by both carriers.

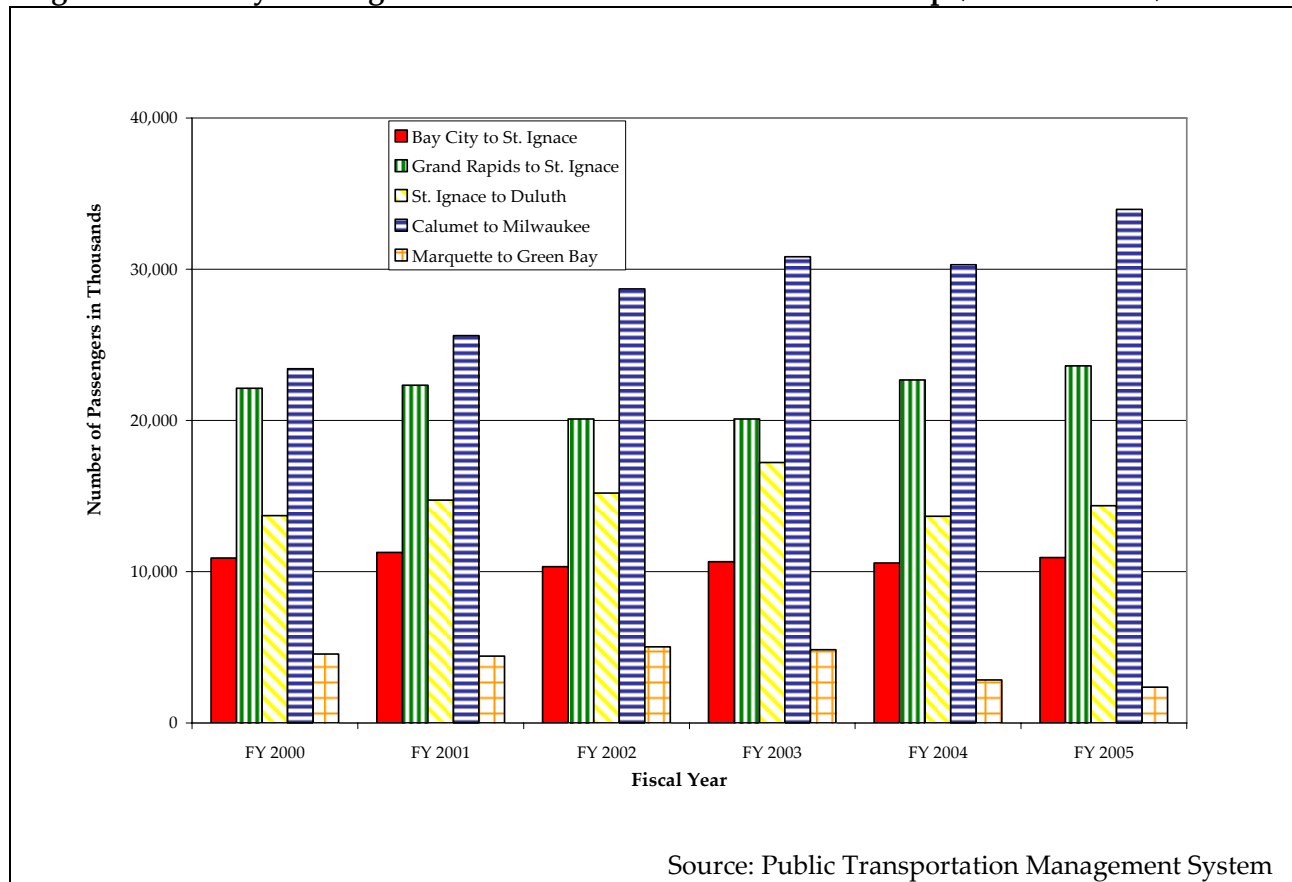
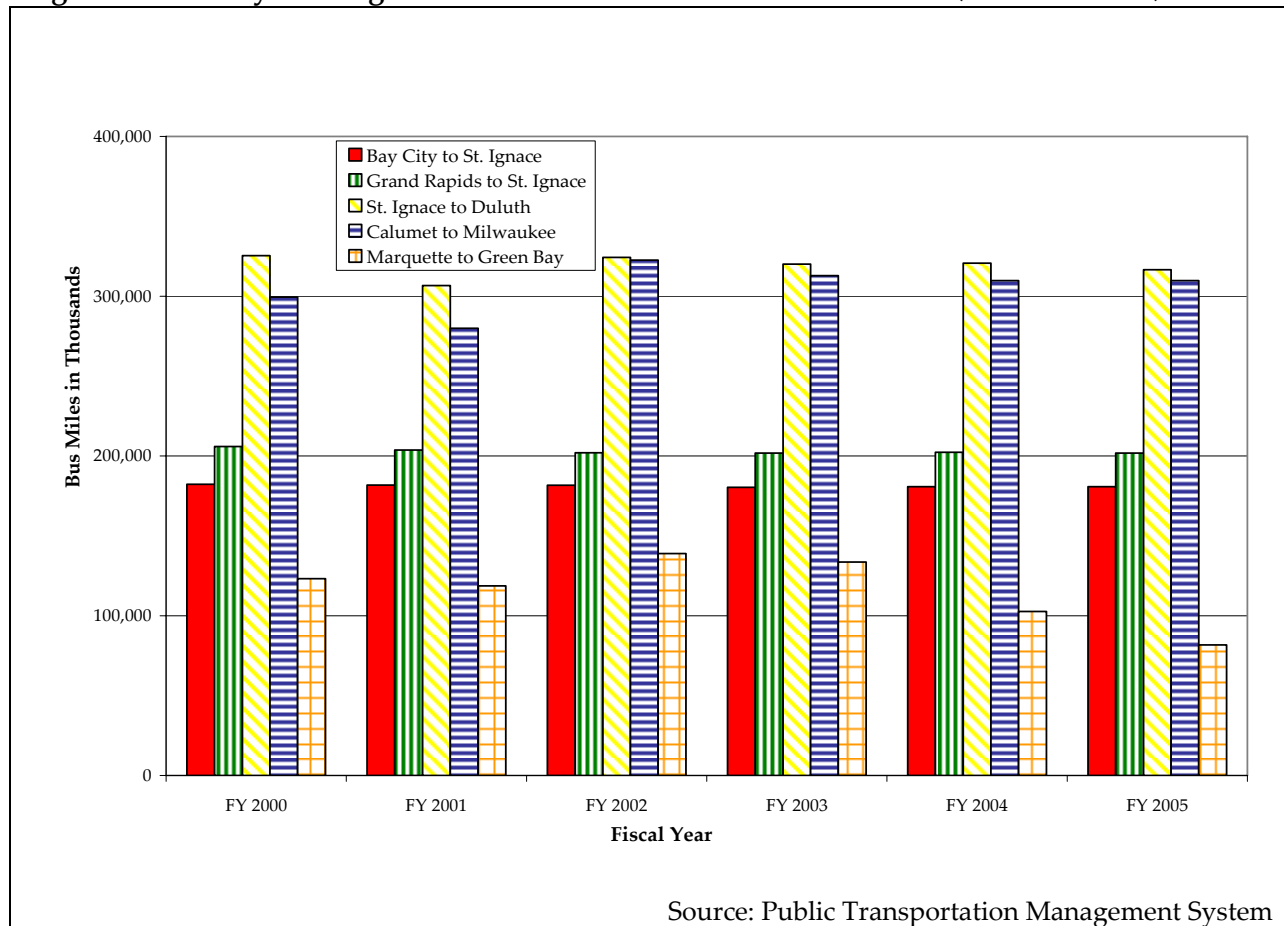
Figure 6: Intercity Passenger State-Subsidized Bus Route - Ridership (FY 2000 – 2005)

Figure 7: Intercity Passenger State Subsidized Bus Route - Bus Miles (FY 2000 – 2005)

2.2.6 Intercity Bus Passenger Characteristics

As part of the *Intercity Rail and Bus Passenger Study* completed for MDOT in November 2002, intercity bus passenger surveys were completed in June and July 2001, with 1,360 questionnaires collected. The surveys showed that a little more than half of intercity bus passengers are single and female. In the older age groups, women accounted for more than 70 percent of ridership. Bus passengers tend to be consistent patrons of intercity bus service. The median rider's household income range is between \$20,000 and \$29,000. While 68 percent of surveyed passengers reported they traveled by automobile to get to their trip origin, it appears that most travelers are dropped off at the station. Forty percent of intercity bus passengers reported the main purpose for their trip was to visit family and friends and 20 percent reported their trip was for pleasure. More than 97 percent of surveyed male and female bus passengers report feeling safe while riding the bus and the reason they chose bus travel over other modes was cost or lack of other options. The majority of surveyed bus patrons say they would use the service again. (Source: *Intercity Rail and Bus Passenger Study*, prepared for the Michigan Department of Transportation by the A. Alfred Taubman College of Architecture and Urban Planning, the University of Michigan, November 6, 2002)

2.2.7 Intercity Bus Passenger Facilities

MDOT owns four of 27 intercity bus passenger facilities; local governments and local transit agencies own and/or operate 22 transportation facilities; Indian Trails owns and operates two transportation facilities. Eighteen facilities are categorized as intermodal facilities and also passenger rail and/or local transit. MDOT provides funding for transportation facility construction and improvement through the Intercity Terminal Program. Terminal improvement projects include facility renovations, indoor air quality, energy conservation, and landscape enhancements. Terminal improvements also include safety and security related projects, such as installation of electronic access control systems, closed-circuit television security systems and interior/exterior lighting upgrades.

2.3 Ongoing Planning for the Intercity Passenger System

2.3.1 Passenger Rail Planning

MDOT interacts with the service provider, Amtrak, on a regular basis regarding the two state-supported routes and to a lesser extent regarding the Chicago-Detroit-Pontiac route, which is part of Amtrak's basic system.

Monthly ridership, revenue, passenger-mile, train-mile, trip origin/destination, and on-time performance statistics are provided by Amtrak for the three routes serving Michigan. Monthly financial statistics are provided by Amtrak for the two state-supported routes and service contracts are negotiated annually. On-board surveys of passengers on the Michigan trains regarding trip characteristics, user characteristics and service satisfaction are conducted by MDOT in cooperation with Amtrak at approximately five-year intervals (the last one was conducted in 2000).

MDOT has assisted in the development of coalitions for the Blue Water and Pere Marquette state-supported routes. These coalitions promote development and use of the service in their respective corridors. At the state level, the Michigan Association of Rail Passengers functions in the same capacity.

2.3.1.1 Midwest Regional Rail Initiative

A long-range plan for intercity passenger rail has been developed in cooperation with eight other Midwestern states. The Midwest Regional Rail Initiative (MWRRI) is an ongoing effort of the state departments of transportation in Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin to develop an improved and expanded passenger rail system in the Midwest.

A steering committee composed of key staff from each of the nine states and Amtrak provide oversight of the initiative with assistance from a consultant team. The Wisconsin Department of Transportation chairs the Steering Committee. MDOT represents Michigan. Amtrak has participated in the development of the long-range plan from the beginning. The Federal Railroad Administration (FRA), the federal funding entity, has provided funding for the development of the plan and been directly involved in the planning effort at

key points. The affected railroads have also been consulted during the plan development phase. Greyhound Lines, Inc. has also assisted in the initiative from time to time.

The current planning work program commenced in late 2005 and is scheduled for three years ending in 2008. It is comprised of four elements: public information and outreach materials, economic impact and benefit cost analysis, system wide environmental analysis, and special studies and analysis. The purpose of this phase is to further ready the MWRRI to qualify for federal funding when it becomes available.

The Midwest Regional Rail System plan calls for a 3000-mile network serving nine states with Chicago being the hub as shown in **Figure 8**. Design train speeds are 110 mph on selected routes including the Chicago-Detroit Corridor and 79 mph on the remaining corridors including Chicago-Grand Rapids and Chicago-Port Huron. The resulting travel time between Chicago and Detroit is three hours, 46 minutes. Design train frequencies range from two to 14 daily round trips with Chicago-Detroit being nine and parts of the corridor being as high as 14. In addition, an extensive system of bus routes that feed rail stations is part of the overall system plan including service in Michigan to communities as far north as Ludington, Cadillac, Mt. Pleasant, and Midland.

The current plan presents estimated infrastructure and equipment capital costs, ridership and revenue forecasts, estimated operating and maintenance costs, and a supporting intercity feeder bus system. It also assesses the freight rail capacity needs related to the provision of modern intercity passenger rail service. The plan has been accepted by all nine state departments of transportation and additional work is being done to position the nine states for federal funding. This includes working to meet the various existing and anticipated federal funding requirements. Work activities include risk management, benefits assessment, environmental evaluation and public involvement in program development.

The cost of the fully built system is estimated to be \$6.6 billion for infrastructure and \$1.1 billion for the 63 train sets needed to operate the system. The feeder bus services would be provided by private carriers owning their own buses. Ridership is forecasted to be 13.6 million by 2025 generating sufficient revenues to cover operating costs, assuming that the entire system is operational. Michigan's share of the cost would be \$873 million for infrastructure and \$234 million for train equipment with the remaining cost being allocated to the other eight states.

Rail Corridor*

- 110 mph top speed
- 90 mph top speed**
- 79 mph top speed
- Feeder Bus Route

*Indiana DOT is evaluating additional passenger rail service to South Bend and to Louisville.
 **In Missouri, current restrictions limit train speeds to 79 mph.

Source: Michigan Department of Transportation

Intercity bus carriers are involved with short and long range planning to address the needs of their riders and their business. Private intercity bus companies must operate profitably. They monitor system information to make adjustments in routes and schedules to better serve their ridership and to meet corporate goals and objectives. Changes that are made by one carrier may affect the service provided by another carrier. Likewise, any changes made by Amtrak may affect the intercity bus service. There are also adjustments to schedules throughout the year to address seasonal variations in ridership.

communities and a realignment of its service between Detroit and Chicago. These changes were made independently by Greyhound. The only role the state could play was to review the impact of the decisions on intercity bus service and determine if a state response was warranted or possible. It is important to note that the presence of two private sector carriers in Michigan means the state must be sensitive to private sector competition and corporate confidentiality issues when working with one or both carriers on future service issues.

2.3.3 Other Passenger Transportation Planning Efforts

Two project level planning efforts underway may also have impact on intercity passenger travel in the future, although their focus is more regional transit in nature.

2.3.3.1 Ann Arbor to Detroit Rapid Transit Study

The Ann Arbor-Detroit corridor is the major east-west travel corridor in Wayne and Washtenaw Counties in Southeast Michigan. The corridor extends 55 miles from the central business district of Detroit to the city of Chelsea along four primary east-west routes including Interstate 94 (I-94), US Route 12 (Michigan Avenue), Michigan Route 153 (Ford Road), and Norfolk Southern Railroad's Michigan Line. Major activity centers along the corridor include Detroit New Center, Downtown Detroit, Dearborn, Detroit Metropolitan Wayne County Airport (Metro Airport), Ypsilanti, and Ann Arbor. These activity centers are home to some of Michigan's largest employers, universities and colleges, medical centers and hospitals, and visitor and cultural attractions. Transit has long been a consideration in Southeast Michigan and in the Ann Arbor-Detroit corridor, in particular.

The *Ann Arbor to Detroit Rapid Transit Alternatives Analysis Study* commenced in 2004 and is scheduled for completion in 2007. It combines two earlier efforts, the *Lansing to Detroit Passenger Rail Study* and the *Downtown Detroit to Detroit Metro Airport Study*, into a single study.

The purpose of the Ann Arbor-Downtown Detroit Study is to:

- Begin implementing the regional transit plan, *Improving Transit in Southeast Michigan: a Framework for Action*;
- Provide direct transit connections between Ann Arbor, Detroit, and Metro Airport; and
- Create an east-west spine on which to build a comprehensive, integrated regional transit network over time.

The study, which is being managed by the Southeast Michigan Council of Governments, includes evaluation of 10 alternatives, six trunk lines, and three modes of transportation (bus rapid transit, light rail, and commuter rail). The deliverables consist of a Federal Transit Administration (FTA) New Starts application including a purpose and need statement, alternatives analysis, locally preferred alternative, and draft Environmental Impact Statement. Other deliverables include an implementation plan and a funding strategy. These are scheduled for completion by spring 2007. Steps beyond that date

include doing preliminary engineering, identifying a local champion, building consensus, and identifying funding sources to match the remainder of the earmark of federal funds.

2.3.3.2 Grand Rapids Fixed Guideway Study

The Interurban Transit Partnership's (ITP) *Major Public Transportation Investment Study* is identifying a corridor and mode of transportation in the greater Grand Rapids metro area that will qualify for major federal funding under FTA's New Starts or Small Starts programs. Ten transportation corridors and 12 modes, such as express bus, light rail, or commuter rail, have been analyzed. Two corridors (the Division Avenue Corridor and the East Grand Rapids/Kentwood Corridor) and two modes (enhanced bus/bus rapid transit and streetcar) remain in the study. Using a travel demand model to predict public transportation ridership in 2030, the study will eventually lead to the selection of one corridor and one mode as the Locally Preferred Alternative (LPA) that will enter FTA's New Starts funding selection process. If the LPA is funded by FTA, ITP's \$14.4 million New Starts earmark (congressional reservation) will fund the corridor project's preliminary engineering.

2.3.4 Safety/Security

Since September 11, 2001, Amtrak has undertaken heightened security measures for the benefit of their rail passengers. An example of one of these measures is the requirement of Amtrak passengers to provide photo identification when purchasing or obtaining tickets, checking baggage, and storing baggage at stations and onboard trains. The safety and security of their passengers is a top priority for Amtrak, and they continue to work with the Department of Homeland Security (DHS) and the Transportation Security Administration (TSA) regarding the safety of passenger rail systems in the United States.

On occasion, MDOT provides funds for intercity bus facility safety and security enhancement projects. These enhancements include improved interior and exterior lighting projects, closed circuit television surveillance systems, card-reader access security systems, ticket counter security glass, and landscape improvements to remove line of sight barriers such as overgrown shrubbery. In addition to MDOT sponsored efforts to promote safety and security for intercity bus service, the intercity carriers have initiated measures to advance intercity bus service safety and security. The carriers also provide training to their drivers and have maintained the highest available rating from the Federal Motor Safety Administration (FMVSA). Also, the US Department of Transportation's data has consistently shown that bus transportation is the safest mode of transportation in the United States.

Intercity regular route and charter bus companies serving Michigan who operate certain types of passenger commercial motor vehicles in interstate or intrastate commerce must comply with, and are subject to, the applicable state and federal regulations. The types of intercity passenger commercial motor vehicles subject to regulatory oversight are:

- A vehicle with a gross vehicle weight rating or gross combination weight rating of 4,537 kg (10,001 lb) or more, whichever is greater; and

- A vehicle designed/used to transport, or has a seating capacity of, 16 or more passengers.

Regulations that apply to these carriers include:

- US Department of Transportation (USDOT), Federal Motor Carrier Safety Regulations (FMCSR), and state of Michigan safety regulations concerning commercial driver's license (CDL);
- Controlled substances and alcohol testing for all persons required to possess a CDL; driver qualifications (including medical exams);
- Driving of passenger commercial motor vehicles;
- Parts and accessories necessary for safe operations;
- Hours of service; and
- Inspection, repair, and maintenance.

The state of Michigan adopts the same FMCSRs, with some slight modifications, to assure the safe intrastate transportation of persons under P.A. 432 of 1982, the Motor Bus Transportation Act, for law enforcement purposes. The act also provides for other comprehensive safety activities which MDOT administers including the monitoring of insurance compliance and annual vehicle mechanical safety inspections of all registered motor buses. MDOT's role under Act 432 is limited to those activities relative to intrastate for-hire transportation.

2.3.5 Use of Technology

2.3.5.1 Rail Passenger

Michigan is in the forefront of locomotive and signal communications/operating technology for the foreseeable future with the development of the Incremental Train Control System (ITCS), a joint effort between MDOT, Amtrak, the Federal Railroad Administration (FRA), and General Electric Global Transportation Systems (GETS). Michigan's ITCS is currently in revenue service in a 45-mile territory on the federally designated high-speed Detroit/Chicago corridor between Mattawan and Niles. The ITCS system has been in revenue service since September 2000. As of September 2005, trains began operating in this territory at 95 mph with expected speeds of 110 mph by the end of 2007.

In October 1995, the state of Michigan entered into a contract with Amtrak to improve the rail passenger station facilities in west Michigan. This project included the installation of video ticketing/travel information kiosks (Quik-Trak machines) at three unstaffed stations along the Pere Marquette service. Since 1995, the contract has been amended to include additional monies and stations. As part of this effort, the installation of Light Emitting Diode (LED) informational signage has begun at several passenger rail stations. These signs provide train status information for passengers inside the stations and at several platforms. These signs also have the capabilities to market local events and messages.

Interactive booking channels, including the internet and Quik-Trak machines, have become Amtrak's leading source for reservations. In Fiscal Year 2005, 45 percent of Amtrak's ticket sales began with interactive bookings. Of this 45 percent, www.amtrak.com accounts for 34 percent of sales and Quik-Trak machines accounting for seven percent. This compares to 26 percent of reservations being made over the phone and 18 percent in person for the same period. Due to the increase in interactive bookings and Amtrak's automated customer service agent, "Julie," at 1-800-USARail, Amtrak has had reductions in their call center operations.

The marketing efforts of station communities have produced a Web site to promote passenger rail in Michigan. This site www.mitrain.com identifies all three of Michigan's services and provides detailed information on our station communities and events. This site will link directly to Amtrak's Web site and reservation system.

2.3.5.2 Intercity Bus

MDOT provides funds to improve intercity bus carrier access to and utilization of technology through the Intercity Service Development Program. Technology utilization projects include computers and peripheral equipment, computer software, and equipment systems for passenger ticketing and employee training. Other technology projects include active and passive security screening and surveillance systems, energy consumption reduction and monitoring, indoor air quality monitoring systems, and pollution mitigation equipment. Greyhound Lines has a ticketing system in place that provides online fare and schedule information and internet ticketing. Indian Trails is currently developing this capability with state funding assistance. These systems reduce the amount of time it takes a passenger to purchase a ticket and enables the company to collect sales information faster.

2.4 Intercity Passenger Funding

2.4.1 State Funding

The Comprehensive Transportation Fund (CTF) is the primary source of state funding for Michigan's public transportation programs.

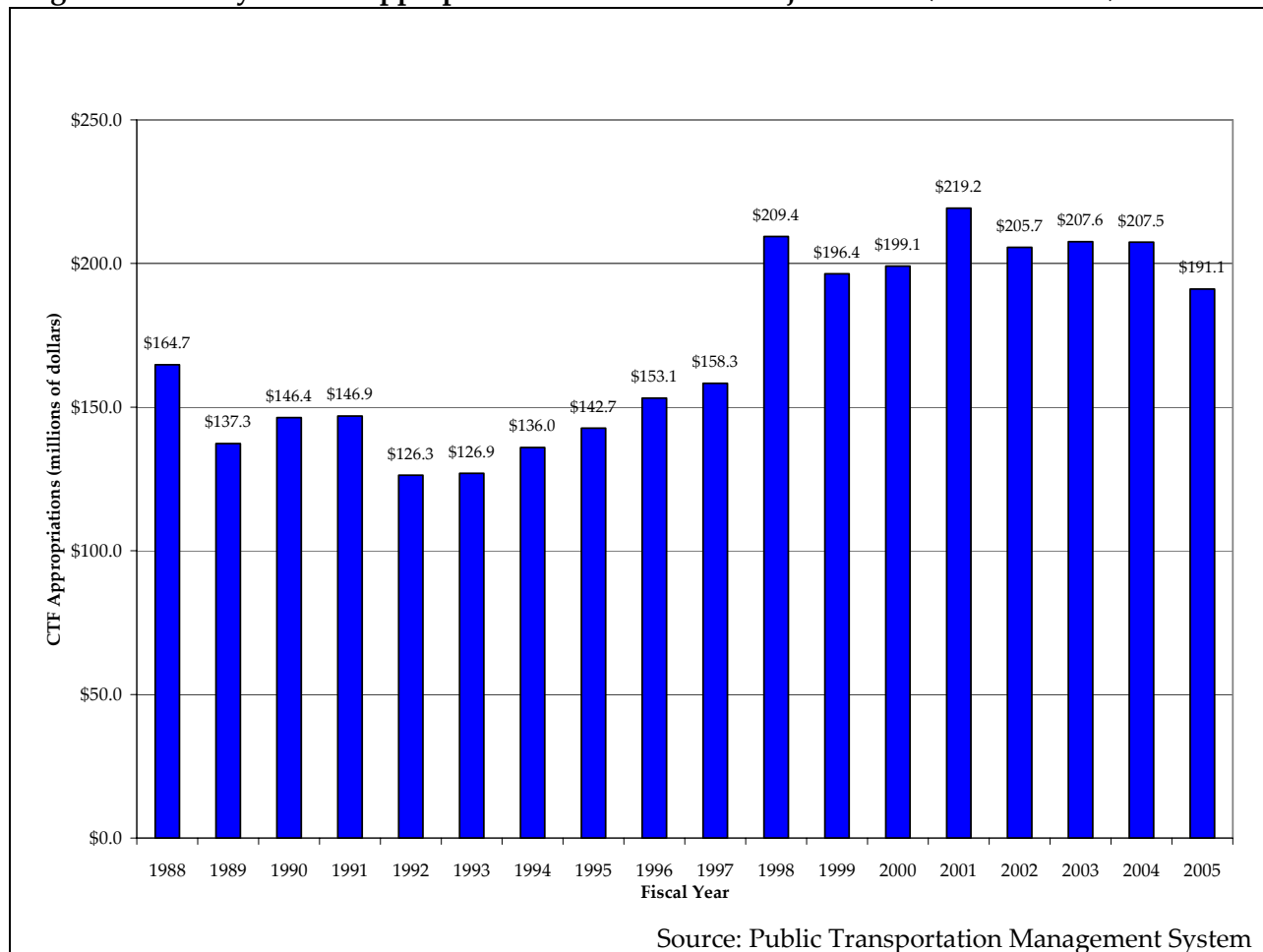
The CTF supports:

- Operating assistance for all intercity bus service in the Upper and Northern Lower Peninsulas;
- Capital assistance for intercity bus service statewide;
- Operating assistance for two of the state's three intercity rail services;
- Intercity rail capital improvements, including the high-speed corridor;
- Intercity terminals and improvements for bus and rail.
- MDOT's delivery and oversight of portions of its multi-modal programs including transit, intercity passenger, rail freight, and for-hire passenger regulation;

- Operating and capital assistance for 79 transit systems;
- Operations and capital support of two publicly-owned marine passenger services;
- Public transportation services throughout the state for targeted populations (seniors, persons with disabilities, and transportation to work for low-income individuals);
- Preservation and maintenance of the state-owned rail freight lines;
- Rail freight-based economic development; and
- Debt service on CTF bonds that support routine capital costs associated with local transit, intercity bus and rail, and rail freight, as well as special projects associated with all forms of public transportation including marine and aviation.

Over the past 10 years, appropriations from the CTF have provided an average of \$200 million annually in programs.

Figure 9: History of CTF Appropriations less Revenue Adjustments (FY 1988 -2005)



2.4.1.1 Revenues to the Comprehensive Transportation Fund

The primary revenues to the CTF are sales tax contributions and transfers from the Michigan Transportation Fund (MTF). The annual contributions of MTF and sales tax to the CTF are set in statute. In general, the MTF distribution to the CTF is approximately two-thirds of its annual revenue, and the sales tax contribution is the other one-third.

Currently, Act 51 of 1951, Section 10 (1) distributes 10 percent from the MTF to the CTF, after certain specified deductions. The annual MTF distribution to the CTF equates to about 8 percent of the MTF before deductions.

Under the General Sales Tax Act, 4 percent of 6 percent of sales tax is to be distributed as follows:

- 15 percent to cities, villages, and townships;
- 60 percent to the state school aid fund; and
- 25 percent as follows:
 - Not less than 27.9 percent of the tax collections from motor vehicle related sales to the CTF; and
 - Balance to the General Fund.

2.4.1.2 Distributions from the Comprehensive Transportation Fund

Section 10e of Act 51 of 1951 requires the following for annual CTF distributions: first priority - debt service; second priority – administration of the fund; and third priority – local bus operating assistance. After these priorities are met, Act 51 mandates that not less than 10 percent of the funds be distributed to Intercity Passenger and Intercity Freight. It is this 10 percent that supports MDOT's intercity bus and passenger programs, as well as MDOT's rail freight programs. Over the last five years the average annual appropriation for these programs has been \$20.4 million.

In addition to those stated above, there are additional mandates, appropriation floors, and funding formulas in Act 51. In combination, the priorities, mandates, floors, and formulas leave little discretion in how MDOT can propose the CTF be appropriated each year. As a result of Act 51, the type and mix of programs supported by CTF appropriations and the funding levels by program have remained relatively steady over the last 10 years.

2.4.2 Federal Funding – Rail Passenger

2.4.2.1 Corridor Development

Title IX federal funds in the amount of \$70 million have been authorized for each of fiscal years 2006 through 2013 for the development of rail corridors including development of the infrastructure and the acquisition of rights-of-way, locomotives, rolling stock, and signal equipment.

2.4.2.2 Technology Development

Title IX federal funds in the amount of \$30 million have been authorized for each of fiscal years 2006 through 2013 for improving rail technology.

2.4.2.3 Rail Line Relocation

Title IX federal funds in the amount of \$350 million for each of fiscal years 2006 through 2009 have been authorized for local rail line relocation projects, which will improve vehicle traffic flow, quality of life and economic development. This may reduce travel times for intercity passenger rail-by-rail system improvements such as improved train access to and from stations.

2.4.2.4 Rail Service and Capacity Enhancement

Title IX authorizes \$35 billion in loan authority for projects that enhance rail service and capacity. Such investments could result in reduced travel times and/or improved on time performance by increasing the capacity of the rail system.

2.4.2.5 Earmarks

Earmarks are funds authorized by Congress for specific projects, some of which impact intercity passenger rail. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) contains an earmark of \$100 million for the Ann Arbor to Detroit initiative and a second earmark of \$14 million for the Grand Rapids initiative. It also contains eight earmarks for railroad-highway grade separations ranging from \$400,000 to \$9 million and located in the greater Detroit and Lansing areas.

2.4.3 Federal Funding – Intercity Bus

2.4.3.1 Section 3038 - Over the Road Bus Accessibility (OTRB) Program

This program grants funds to operators of over-the-road buses to help finance the incremental capital and training costs of complying with the department of transportation's over-the-road bus accessibility final rule. Federal Transit Administration (FTA) will solicit applications; grantees will be selected on a competitive basis. There are \$7.4 million available nationwide in FY 2006.

2.4.3.2 Section 5311(f) - Intercity Bus Transportation

Under Section 5311 of SAFETEA-LU's transit programs, the Federal Transit Administration apportions federal funds to the states each year to support nonurban transit. SAFETEA-LU requires 15 percent of Section 5311 funds be set aside to support intercity bus transportation unless the state certifies, after consultation with affected intercity carriers, that the intercity service needs of the state are being met. Michigan's intercity bus set-aside for FY 2006 was \$2.2 million. These federal funds combined with the annual Comprehensive Transportation Fund appropriations are critical to maintaining a minimal level of intercity bus service in Michigan and terminal enhancements.

2.5 Additional Policy Context

The previous section provided information about state and federal funding for intercity passenger services. Funding programs and requirements have a significant influence on how MDOT and the intercity carriers approach intercity passenger service in Michigan. For example, as described in **Section 2.4.3.2** above, MDOT must expend a portion of its federal nonurban transit funds to support intercity bus and as described in **Section 2.4.1**, Act 51 requires 10 percent of CTF program funds distributed each year be used for intercity passenger and intercity freight.

This section describes other factors that provide policy context, i.e., that influence how MDOT and the intercity carriers approach intercity bus service in Michigan.

2.5.1 Act 295 of 1976

Under the State Transportation Preservation Act of 1976 (Act 295) planning, development, acquisition and operation rail, intercity bus, and ferry services constitutes a valid public purpose. The legislation authorizes MDOT to, among other things, purchase intercity bus equipment and related station and servicing facilities. It allows the department to acquire equipment and facilities to be utilized by intercity bus operations, under terms and conditions determined by the department. It also authorizes the department to contract with a person, firm or public or private corporation to provide rail, intercity bus or ferry service deemed by the department to be in the best interest of Michigan.

2.5.2 Annual Appropriations Requirements

When the Legislature appropriates funding each year, the appropriations legislation may include specific requirements or restrictions on how the appropriated funds are to be used. These annual restrictions or requirements are found in the portion of an appropriations bill commonly referred to as “boilerplate.” Some boilerplate requirements are included in the appropriations bill year after year and as such, over time, the requirements or restrictions begin to shape the state’s approach to intercity passenger service.

For passenger rail, the appropriations boilerplate has required Comprehensive Transportation Funds appropriated to MDOT to be used to negotiate with a rail carrier for seven-day service between Grand Rapids and Chicago and between Port Huron and Chicago. Over the years, other parameters have been outlined in the boilerplate such as staffing of stations, marketing, and the submission of an annual report to the legislature on ridership and revenue. In most recent years, a maximum amount of state funding to be provided for the service as been identified in this boilerplate. The Pere Marquette and the Blue Water services are the results of this annual legislative mandate.

For intercity bus, the appropriations bill has designated specific bus routes as an essential corridor and has stated that no entity shall receive operating assistance for a scheduled regular route service, which is competing with another public or private carrier over the same route.

Other intercity bus boilerplate has included a requirement that proceeds received by the state from the sale of intercity bus equipment be used for the purchase and repair of intercity bus

equipment. In addition, in recent years, additional boilerplate requirements have been added in such as a requirement that a portion of the Comprehensive Transportation Funds appropriated for intercity service development funds be used for lost ridership support and/or marketing efforts, a requirement that state-owned intercity bus equipment shall be sold within six months of lease termination, and a requirement that MDOT coordinate intercity bus service.

2.5.3 MDOT Transportation Summit

To build on a foundation of partnership and assure Michigan's continued success, MDOT hosted a Transportation Summit in 2003 and 2004. Transportation industry partners, citizens, members of the legislature, academia, and the federal government were invited to help MDOT create a vision and a set of action plans for the future of transportation in Michigan. The process began with planning meetings that started in the summer and autumn of 2003 and culminated with the summit conference in December 2003. A follow-up conference was held in December 2004.

From June 2003 to November 2003, planning teams met to explore and consider nine key issues. At the December 2003 Summit, over 500 people from Michigan, Canada, and neighboring states came together to discuss and further refine the nine key issues. After the Summit, nine action teams formed to turn the issues into action. While each of the nine issues touch on all aspects of the transportation system, the Coordination, Cooperation, and Connectivity team focused on intercity passenger issues.

The Coordination, Cooperation, and Connectivity Summit Action Team goals included:

- Fully integrate private multi-modal transportation (people and freight) into the planning, decision-making, and implementation and operation of the transportation system;
- Incorporate a seamless, integrated multi-modal transportation system that is cross-locality and cross-regional in nature; and
- Provide financial incentives for developing a comprehensive and coordinated approach to our transportation system at all levels and on all projects.

The team developed proposed actions to help meet the above goals. Several of the actions involved intercity passenger transportation and included the following:

- Develop formal coordination mechanisms between modal providers to improve intermodal connectivity for both goods and people;
- Develop a plan to tie funding, including incentives, tools, and planning for implementation of seamless/integrated multi-modal methods of transportation across regions;
- Create incentives and rewards for transportation providers to better coordinate transportation services across all modes;
- Provide State leadership in providing incentives to local agencies and programs to coordinate their transit resources for maximum efficiency of resources; and

- Create regional transportation planning teams to prioritize and implement improvements to the transportation system by supporting Michigan's economy and quality of life.

2.5.4 Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

A significant aspect of SAFETEA-LU's legal and policy influence over intercity bus can be found under FTA's Section 5311(f) Program. As described above, each state may spend 15 percent of its annual federal apportionment for nonurban transit to develop and support intercity bus transportation. There are three objectives for funding intercity bus service under the Section 5311(f). The first objective is to support the connection between non-urbanized areas and the larger regional or national system of intercity bus service. The second objective is to support the services needed to meet the intercity travel needs of residents in non-urbanized areas. The third objective is to support the infrastructure of the intercity bus network through planning, marketing, and capital investments.

SAFETEA-LU added intercity bus and rail terminals to the joint development authority and exempted them from the prohibition on supporting the construction of space for commercial, revenue-producing activities. FTA has interpreted this exception as applying to the construction cost of these facilities, not their ongoing reasonable costs of maintenance. FTA guidance provides that the intercity bus or rail facilities must have a "physical and functional" relationship to the public transportation facility to be eligible as a capital project. Michigan has limited experience with joint development authorities.

2.5.5 Rail Reauthorization

There are several bills that have been introduced in Congress regarding the future of rail in the United States and Michigan. House Bill 1630 entitled "Amtrak Reauthorization Act of 2005" and House Bill 1631, entitled the Rail Infrastructure Development and Expansion Act for the 21st Century (RIDE-21), are bipartisan. House Bill 2992 entitled "True Reinvestment for Amtrak Infrastructure in the 21st Century Act" (TRAIN-21) is sponsored by House Democrats. Senate Bill 1516 entitled Passenger Rail Investment and Improvement Act of 2005 is bipartisan. House Bill 1713 entitled Passenger Rail Investment Reform Act is the current administration's bill.

There is movement regarding some of the bills. HR 1630 and HR 1631 are companion bills and have been placed on the Union Calendar (House of Representatives calendar for revenue and appropriation measures) as Calendar No. 152 and Calendar No. 201 respectively. However, all of the funding provisions have been deleted from HR 1631. On the Senate side, S 1516 has been placed on the Senate Legislative calendar under General Orders with all the funding provisions passed by the Committee on Commerce, Science, and Transportation intact.

Federal legislation dictates Amtrak's future on an annual basis. This includes funding for the intercity passenger rail infrastructure, equipment, and level of service. For instance, HR 1630 would authorize \$2 billion per year in Amtrak funding for fiscal years 2006 through 2008. S 1516 would authorize \$1.9 billion per year for a six-year period. All three Michigan routes could be affected if Amtrak funding is reduced below current levels. Michigan has lobbyists

that help shape federal legislation including Amtrak appropriations. MDOT negotiates with Amtrak annually regarding the two state-supported routes.

Rail system plan implementation depends on the availability of federal funding. As of April 2006, the funding provisions have been deleted from S 1631 (RIDE-21). S 1516 has funding provisions using bonds at the rate of \$1.3 billion to be issued each year for a 10-year period. The MWRRI system plan is estimated to be \$7.7 billion with Michigan's portion of the plan costing \$1.1 billion. There would be considerable competition for the funding making it questionable whether MWRRI would be one of the funding recipients. Even if selected, the level of funding would set the implementation schedule. If no action is taken on the proposed legislation, planned implementation would be postponed but the plan would remain valid.

Another feature of rail reauthorization legislation is the plan required to qualify for the funding. HR 1631 focuses on high-speed rail corridors and development of corridor plans. S 1516 focuses on development of a national rail plan that includes high-speed rail with state rail plans being a federal funding prerequisite. In accordance with S 1516, the state rail plan would have to include the following: (1) an inventory and analysis, (2) identification of proposed high-speed rail corridors and significant rail line segments not currently in service, (3) statement of service objectives including minimum service levels, (4) an analysis of rail transportation, economic, and environmental impacts, (5) long rail investment program for freight and passenger infrastructure, (6) statement of public financing issues relating to rail infrastructure development. Michigan does not have a state rail plan and is reluctant to prepare such a plan without specific federal guidelines on what the plan should include.

2.5.5.1 Michigan State Transportation Commission (STC) Resolution 2004-1: Commission Policy on Intercity/High-Speed Passenger Rail

In late 2003 and early 2004, MDOT sought policy guidance from the State Transportation Commission (STC) on intercity/high-speed passenger rail. The intent was to provide MDOT with a policy foundation that department staff could reference as various executive and congressional rail reauthorization proposals were evaluated and as Michigan's Congressional delegation advanced MDOT's agenda for rail reauthorization. In response, the STC adopted Policy Resolution 2004-1 in February 2004.

The STC Policy Resolution has five components which are as follows: (1) promote intercity/high-speed passenger rail service as being a key component of a balanced transportation system, (2) promote a national/federal vision for intercity/high-speed passenger rail service as essential to the successful provision of rail service in the United States and Michigan, (3) promote a dedicated, multi-year funding source as being critical to achieving the vision regarding the design, implementation, and operation of an intercity/high-speed passenger rail system, (4) hold the freight railroads harmless financially and operationally in the provision of intercity/high-speed passenger rail service, (5) if Amtrak fails to meet reasonable performance goals, nurture an intercity passenger rail operating environment that encourages a competitive selection process among various service providers.

2.5.6 Operator Legal and Policy Context

As noted earlier, it is important to view the intercity passenger network in Michigan in context of a national system that is heavily influenced by the decisions of the individual carriers. Therefore to understand the system, it is important to understand the context in which the carriers operate.

2.5.6.1 Amtrak Reforms

In their *Amtrak Strategic Reform Initiatives* overview for fiscal year 2006, Amtrak states that business as usual is not sustainable and calls for reform from all sides. Reform initiatives will be structural, operational, and legislative and require joint Amtrak and government action. Completed structural initiatives include management controls, which have produced fewer management layers, GAAP-based accounting, zero-based budgeting, a focus on core business, and a state-of-good-repair capital program. Additional initiatives are being addressed structurally, operationally, and legislatively. The overall basic principles in the rebuilding of America's passenger rail system suggest that the roles of intercity passenger rail and of Amtrak must be uncoupled; the future of passenger rail depends on federal capital funding match program and realizing full potential requires competition for services and functions.

2.5.6.2 Track Ownership

The intercity passenger rail track infrastructure is, for the most part, owned by the freight railroad companies. This requires operating agreements between the service provider, Amtrak, and the railroad whose trackage is being used to provide the service. Amtrak, by federal law, is not required to fully compensate the owning railroad for use of their trackage. Amtrak does own nearly 80 miles of track between Kalamazoo and the Indiana/Michigan state line. However, the remainder of the three routes serving Michigan communities is owned by three private railroads Canadian National (CN), CSX Transportation, Inc. (CSX), and Norfolk Southern Corporation (NS). CSX and NS have joint ownership of Consolidated Rail Corporation trackage. Intercity passenger rail service is influenced by this ownership in two ways. First, freight railroads have to make on-time delivery of freight to their own set of customers. This can interfere with the dispatching of Amtrak trains from time to time causing Amtrak trains to be late. Second, all other potential rail passenger service providers do not have these same track access rights, making it difficult to compete with Amtrak.

2.5.6.3 Intercity Bus Corporate Ownership

The intercity bus carriers are private for-profit companies, therefore, the profitability of a route plays a major role in whether the carrier will initiate new service or continue an existing route. It is important to view Michigan's intercity bus services and MDOT's role in context of this corporate ownership. This concept is best illustrated by two observations made by a Greyhound Lines official in a September 27, 2006 letter to MDOT based on their review of draft of this report *"First, Greyhound service in Michigan is operated primarily to be*

part of an integrated national systems and therefore scheduling and connectivity are part of a larger framework designed for the smooth flow of passengers into and out of the national system. Second, Greyhound's performance measurement criteria and purpose is primarily driven by the Company's bottom line to remain profitable as a going and surviving concern. A complementary benefit of that service is that it may yield outcomes that are compatible with performance measures established by MDOT for customer convenience, frequency, scheduling or interconnectivity to other modes."

Chapter 3. Performance Measurement

3.1 Passenger Rail

The Intermodal Management System (IMS), one component of MDOT's Transportation Management System (TMS), contains ridership, revenue, and level of service data supplied monthly by Amtrak. The IMS generates reports using this data by month or by year and calculates various ratios used as performance measures.

There are a number of indicators used to measure the performance of intercity passenger rail services. Among these are the following:

- Yield (revenue per passenger-mile). This is used by Amtrak to measure the performance of individual trains and services. In 2005, the yield was 14 cents for the Pere Marquette, 12 cents for the Blue Water, and 13 cents for the Wolverine resulting in 13 cents for the entire Michigan system.
- Cost-effectiveness (revenue to cost ratio). The revenue to cost ratio indicates the ability of revenues generated by the service to cover the cost of providing the service. Revenue and costs can be compared directly or using ratios such as revenue and cost per passenger-mile or revenue and cost per train-mile.
- Productivity (passenger-miles per train-mile). This indicates how much travel is generated by the service being provided. In 2005, the Pere Marquette ratio was 116 passenger-miles per train-mile, the Blue Water was 96 and the Wolverine was 133, resulting in 122 passenger-miles per train-mile for the entire Michigan system.
- On-time performance (percentage of trains within allowable arrival time bracket). Daily reports are accessed, reviewed, and summarized for monthly reports. Trains are expected to leave as scheduled and arrive within 15 minutes of their scheduled arrival time.
- Customer Service Index (comparisons of monthly customer surveys). This includes monthly surveys by Amtrak to obtain customer feedback on each service route (Pere Marquette, Blue Water, and Wolverine). This includes obtaining feedback on such items as overall satisfaction, on-time performance, cleanliness, comfort, staff courtesy, etc.
- Trip generation (boardings/de-boardings per service area population). This provides an idea of the ability of a given service area to generate intercity passenger rail ridership. In

2000, for instance, Ann Arbor generated 323 passengers per 1000 population; Lansing generated 95, but Lansing has one-third of Ann Arbor's level of service.

Amtrak also provides on-time performance data for each of the three routes serving Michigan. MDOT is provided access to Amtrak's Arrow System over the internet. MDOT can download the daily train reports filed by the train conductors. This report indicates the scheduled arrival times for each station and then actual arrival and departure times for each individual train. The report also details conditions that may have caused a delay to the train and the amount of time resulting from any delay. Examples of conditions recorded include freight interference, signal interruptions, weather related problems, speed restrictions and car/train crashes. The Arrow System reports allow MDOT to determine problem areas, identify trends that may be disrupting service, or other situations that need to be addressed by Amtrak and MDOT to improve or restore customer satisfaction. MDOT analyzes the reports on a monthly basis and provides reports per management and informational purposes.

The items tracked the most are ridership, revenue, and on-time performance. Monthly ridership figures assist in assessing such items as marketing activities and changing gas prices. Monthly revenue figures help assess the subsidy requirements for the current and future years. On-time performance is one of the most critical service features, as it can have a dramatic impact on ridership.

3.2 Intercity Bus

MDOT routinely collects subsidized and non-subsidized intercity transportation statistics from intercity carriers and during onsite field inspections for entry into the Transportation Management System (TMS). This data is utilized by MDOT to assess statewide and corridor specific service performance, as well as operating and capital needs.

MDOT monitors intercity bus route operating efficiencies/deficiencies and transportation facility conditions. Monitoring activities include field inspections, field interviews of intercity bus passengers and carrier's agents and drivers, inspection of carrier's equipment, and monitoring safety events such as checking bus speeds, use of the vehicle signaling devices, and adherence to published timetables and designated stops. Operating performance is unacceptable when vehicle operation demonstrates recurring violations of posted speed limits, safety issues such as failure to use directional signals, failure to come to complete stops at rail crossings, and failure to adhere to published timetables and stops. Facility performance factors include monitoring each facility and/or bus stop location for janitorial and cleanliness issues, safety factors such as active surveillance systems, appropriate lighting, winter deicing, ADA compliance, and adherence to scheduled routine facility and maintenance and repairs of HVAC, plumbing and sanitary and electrical systems.

The reporting of route activity data is contractually required for all state-subsidized intercity bus routes. Each carrier under contract must provide monthly route reports showing passenger and freight revenue, passenger counts by route, and total miles operated. In addition, the carriers must also report significant events that affect the operation of the route, such as service interruptions, service cancellation and service complaints. The carriers are obligated to institute

procedures to cope with stranded passengers. When the carrier cancels or interrupts route service due to equipment breakdown or adverse weather conditions, the carrier provides passengers with adequate, safe shelter.

MDOT monitors non-subsidized and subsidized intercity routes with the principal intention to enhance intercity service safety, service quality, on-time performance, and access equality for all persons to affordable and convenient intercity transportation. One key performance goal is to prevent the isolation of small urban and rural communities with connections to major urban population centers, social organizations and events, educational centers, medical facilities, and the national intercity transportation network.

As noted above, the individual carriers also have performance measurement criteria driven by corporate goals and objectives.

Chapter 4. Issue Agenda for Intercity Passenger

There are number of issues that need to be considered in planning for the future of intercity service in Michigan. They are discussed below.

4.1 Coordination/Collaborative Service Planning

There needs to be increased coordination between intercity carriers both within a mode and between modes (both between bus and train and between bus and air). There also needs to be increased coordination between intercity carriers and local transit providers. The goal is to have a seamless system of public transportation through Michigan and connecting to the national network.

In an optimal situation, coordinated service planning would be a collaborative process involving the infrastructure owners, service providers, funding sources, and customers. It would result in intercity passenger services adequately serving Michigan residents, visitors, businesses, universities, and other attractors. Coordinated planning would lead to intercity passenger rail providing access to Michigan's larger urbanized areas with a higher level of service in Michigan's high-speed rail corridor, Detroit-Chicago. These services would connect to the Midwest's intercity passenger rail hub (Chicago), to Canada's VIA system, and the northeast corridor via Toledo. Intercity bus services would provide access to communities throughout the entire state connecting them with Chicago and Detroit, two of the largest intercity bus gateways in the Midwest. Intercity bus services would provide access to all of Michigan's urbanized areas and most urban areas located throughout the state and would be supported by local and regional transit services. Second, it would provide feeder bus service to and from the intercity passenger rail stations, thereby extending the coverage of the intercity passenger rail system to include all of Michigan's urbanized areas. Third, intercity bus service and intercity passenger rail service would complement one another in Michigan's high travel corridors.

Coordination also needs to make sense to the carrier. It must be fiscally logical and meet corporate objectives. From a carrier perspective, coordination may include joint use of terminals, interline ticketing, and interchangeable use of smart cards. Coordination can also mean the carriers working together to develop a network that optimizes the private and public resources in meeting passenger needs. While there are compelling reasons for intercity passenger carriers to coordinate their routes and schedules, there are also significant obstacles to coordination. There are only a limited number of intercity routes in Michigan that are profitable and these routes are used by all carriers to connect to their national networks. The competition for revenue in these key corridors and the need for service to connect with national networks can be a hindrance to coordinating service within Michigan. There are also legal limitations on coordination efforts under federal law or the nature of proprietary business information and decisions impacting such coordination. Short and long-term goals of individual carriers and limitations in the levels and predictability of public funding can work in conflict with collaborative service planning. Therefore, MDOT needs to continue to look for ways to encourage and facilitate coordination in this challenging environment.

4.2 Funding/Capacity Limitations

Adequate, sustained, and predictable level of funding are critical to achieving a balanced transportation system for Michigan residents and visitors. This includes a sufficient amount of federal funds with the state and local governments having the ability to match.

A balanced transportation system is envisioned as one that accommodates the safe and efficient flow of people and goods using an integrated system of highways, airports and air service, rail stations and rail service, intercity bus stations and intercity bus service, and transit services. Rail service would consist of passenger rail and rail freight operating at conventional speeds and higher speeds on selected routes. .

Federal and state funding for intercity bus service has been relatively stable and predictable. However, as private services continue to decline, it is not clear public funds can fill all the resulting service gaps. Federal and state-funding for rail passenger service has been considerably less predictable and an ongoing source of political debate. A well-maintained infrastructure with sufficient capacity is critical for safe, dependable intercity/high-speed passenger rail and freight rail operations, and financial health. Rail capacity and safety can be achieved by making intercity/high-speed passenger rail improvements in the following five areas: (1) track infrastructure, (2) train control, (3) equipment, (4) stations, and (5) grade crossings. Focusing improvements in these areas will contribute to addressing the four major concerns of freight railroads: (1) degradation of freight service, (2) full compensation, (3) safety, and (4) liability. In rail segments with high volume intercity/high-speed rail and rail freight operation, dedicated trackage for intercity passenger rail should be seriously considered.

4.3 Performance Measurement

The use of performance measures is critical to the delivery and maintenance of an outstanding transportation system. These performance measures should meet the following criteria.

- The performance measure should measure an outcome related to one or more of the state long-range transportation plan goals;
- Reliable information regarding that performance measure is being collected on a regular basis or can be obtained at a reasonable cost; and
- The relationship of the performance measure to the state long-range transportation plan is easily understood.

Measures that should be used to assess the performance of Michigan's intercity passenger transportation infrastructure, equipment, and service include the following: (1) customer satisfaction surveys such as onboard rail and bus surveys, (2) fleet condition, use and age, (3) level of service such as frequency, on-time performance, and equipment quality, (4) intermodal terminals such as the number, condition, and enhancement of multi-modal facilities, (5) percent of population served.

In addition, the impact of a station on its environs and community should be assessed. A community benefits assessment model, to be used in conjunction with the Transportation Management System/Intermodal Management System, is being developed to assist in this impact analysis. This will provide justification for investments in infrastructure and services. A special focus will be placed on facilities with existing and potential intermodal characteristics. The character of the existing service areas and opportunities for improved connectivity among modes will be identified.

Chapter 5. Integration

The intercity passenger transportation services programs and assets described in this *Intercity Passenger Technical Report* provide the building blocks for understanding the integral role of intercity passenger transportation in *MI Transportation Plan*. This report highlights both the need for integrated intercity operations and services, as well as the integration of intercity passenger services with transit and other modes and services.

The findings of this report are further elucidated by the *Socioeconomic Technical Report*, the *Travel Characteristics Technical Report*, and the *Transit Technical Report*; they provide additional detail about the changing demands and conditions under which Michigan's transit services will perform in the future. In particular, the *Travel Characteristics Technical Report* indicates that 86 percent of trips of 100 miles or more are made for "pleasure" purposes, with rail and bus collectively accounting for only 1.5 percent of the modal shares for these trips. However, it should also be noted that many intercity passenger trips are less than 100 miles, and the *Transit Technical Report* cites a need for a cohesive set of passenger transportation services spanning county and other jurisdictional boundaries. Consequently, integrating intercity passenger services with transit and other modes, and supporting intercity passenger connections, is an important issue for *MI Transportation Plan*.

This *Intercity Passenger Technical Report* has linkages to the *Safety Technical Report*, the *Highway and Bridge Technical Report*, the *Transit Technical Report*, the *Land Use Technical Report* and the

Economic Outlook Technical Report and is referenced in the integration sections of those and other technical reports. Integrating intercity passenger services as part of a multi-modal vision entails leveraging the assets and services described in this report with other system assets to meet the changing needs of Michigan's system user segments. Integration of intercity services may remove barriers to economic participation by Michigan's travel segments. It may also trigger valuable economic activity by connecting workers, consumers, and businesses to key activities and markets supporting Michigan's economic vitality.

5.1 Intercity Segments and Passenger Activities

An integrated transportation system for Michigan entails intercity passenger services that play a role in enabling Michigan's traveler segments to engage in key economic activities. Key population segments currently using intercity services and key activities dependent on intercity passenger service include the following.

5.1.1 Low-Income Populations

It is found in this *Intercity Passenger Technical Report* and in the *Travel Characteristics Technical Report* that both the bus and train modes for intercity passengers are more utilized by members of low-income households than those in the middle and high-income brackets. As mentioned above, the *Travel Characteristics Technical Report* also finds auto ownership is lower in these brackets, and the dependence on other drivers to provide transportation is higher. **Section 2.2, Intercity Bus Service**, of the current Intercity Passenger report notes that 40 percent of intercity bus ridership supports visits to family and 20 percent supports vacation travel for this segment.

The *Socioeconomic Technical Report* highlights the importance of low-income households as an Environmental Justice population and offers some insight into those areas of Michigan where these households are located. An integrated approach to intercity passenger transportation entails complementary modes at train and intercity bus stations to facilitate local (intra-city) travel to required destinations for low-income passengers generally depend on others to provide passenger vehicle transportation at the destination of an intercity bus trip. Access to family support networks is an economically important resource for low-income households in which all members (including children and elderly members) may be more adversely affected by periodic changes in employment, income status, and basic expenses such as housing and health care. Consequently, the role of intercity passenger services provides access to an important economic fortification for these households and is especially important to the low-income segment of Michigan's economy.

5.1.2 Consumption and Leisure

Section 2.2, Intercity Bus Service, finds that 20 percent of Michigan's intercity bus passengers travel for recreational purposes. While a similar statistic is not offered for passenger rail, the *Travel Characteristics Technical Report* suggests that pleasure-oriented travel accounts for a large share of intercity trips, with rail maintaining representative shares for most purposes (including "pleasure").

For this reason, both the bus and rail intercity services are important to support consumer markets at vacation destinations. This is especially true at those destinations catering to households in the low-income brackets (which may include single adults with only one income in the household). **Section 5.1.1, Performance Barriers and Opportunities** explores some of the ways in which intercity bus and rail services can potentially serve as stimuli for tourism and recreational consumer markets. For these activities, the quality and comfort of the vehicles is an important driver of economic value, as pleasure is the primary purpose of these trips.

5.1.3 Family Obligations and Activities

The importance of family visits and activities for Michigan's economy was first explored with regard to low-income passengers in **Section 5.1.1, Low-Income Populations**. It should be noted that children, the elderly, and other members of the non-driving population might utilize intercity services to engage in these activities. However, the importance of low-income segments of the population utilizing intercity passenger services is critically important for family networks for the reasons described in **Section 5.1.1, Low-Income Populations**. For example, family members may provide access to periodic resources and services (such as care for the ill or for children) not otherwise available in a low-income household, making intercity access to extended family a key driver of the economic viability of the household itself. As with religious and educational activities, access to family obligations and activities also creates value in Michigan's quality of life and the retention of workers and consumers.

5.1.4 Work and Business

While workforce commuting and business travel are not currently significant sources of intercity rail or bus service in Michigan, these activities represent an important potential segment for intercity passenger service. Because in the findings of the *Transit Technical Report* trips spanning jurisdictional boundaries are cited as a key issue facing transit, intercity services may offer a potential complement or augmentation of localized transit services in the future. If intercity services come to be used in this way, their importance and role in Michigan's economy may be expanded. The economic participation of workers and consumers separated from trade centers by jurisdictional boundaries that currently serve as a barrier to activities for transit dependent populations will expand too.

5.2 Performance Barriers and Opportunities

"Performance barriers" are conditions on the transportation system that make it more difficult, more expensive, or impossible for an activity to take place. In the economic impact element of *MI Transportation Plan*, performance barriers are represented as costs of doing business; however they also include barriers to households and individuals. In the *Conditions and Performance Technical Report* of *MI Transportation Plan*, performance barriers are described by performance measures. "Opportunities" are conditions on the transportation system that make it easier, less expensive, or possible for an activity to take place that may not otherwise occur. In the economic impact element of *MI Transportation Plan*, opportunities are represented as amenities; however, they also include opportunities for households or individuals in addition to

businesses. For the purposes of this report, opportunities are understood as special ways in which system performance may stimulate users to engage in more or better activities.

There are a number of performance barriers currently limiting the utilization of intercity services for participation of Michigan's intercity passengers in the workforce, in markets, and in the cultural and educational activities important to the state's vitality. Within the set of issues identified in this technical report, there are also potential opportunities to enhance participation in the state's economy through integration of intercity services in *MI Transportation Plan*.

5.2.1 Performance Barriers

5.2.1.1 Limited Service Schedules

Intercity schedules are primarily geared toward one-way trips within any given day. Consequently, schedules often do not permit a round trip on any given day. This is a performance barrier to the use of intercity services for workforce commuting or for other purposes that do not entail an overnight stay at the destination. The lack of intercity schedules conducive to daily round trips inhibits the degree to which intercity segments can participate in jobs or markets that require intercity access on a daily basis. This performance barrier is exacerbated by the jurisdictional challenges which also serve as a performance barrier to intercity (or intercounty) trips cited in the *Transit Technical Report*.

5.2.1.2 Limited Service Availability

Section 2.2.5, Subsidized Intercity Bus Service, of this report indicates areas where intercity bus service has declined in recent years, citing some of the reasons why these services are no longer available. Population density and travel patterns make it difficult for the private carriers to operate profitable services, especially when services are unsubsidized. The challenges of designing and operating economically feasible routes in many areas of the state limits the availability of intercity services and accounts for the role of the subsidies described in this technical report. It should be noted that limited availability is part of a cycle whereby travel patterns and activities adapt to less intercity service, diminishing the market and dependence on such services. However, the lack of available intercity services limits the range of jobs and markets in which Michigan's non-driving population can participate. Furthermore, as suggested in **Section 5.1.1, Low-Income Populations**, and in the *Travel Characteristics Technical Report*, the dependence of the non-driving population on sharing rides driven by others makes intercity travel a more limited option for this segment.

5.2.1.3 Price (Affordability)

Because many of the segments utilizing intercity services are in the low-income brackets, intercity passengers are expected to be more cost-sensitive than other segments. Consequently, for these segments, the costs of traveling comprise a larger proportion of a scarce income relative to other activities. If the traveler cannot afford both the cost of travel and the activity itself, the activity must be foregone due to the expense of the trip. In this way, the cost of intercity travel inflates the costs of all activities only accessible by intercity rail or bus. For intercity travelers, the cost of intercity travel to participate in health care,

vacation, and other higher-cost activities may inhibit the participation in these other markets as well as the economic benefit such populations may derive from such participation.

5.2.1.4 Freight vs. Passenger Rail Trade Offs

The timeliness and reliability of passenger rail is affected by the sharing of rail lines with freight providers. The sharing of lines is a source of delay on some passenger routes and limits the scheduling and available capacity for the development of more frequent or faster passenger services. This is a performance barrier for the passenger rail users since it restricts access to markets and jobs by rail.

5.2.1.5 Coordination/Planning Limitations

As noted before, MDOT's ability to guide, plan and coordinate intercity passenger services is limited for several reasons. First, each carrier has its own corporate goals, strategies and approach to meeting customer demands and preferences that may or may not be consistent with MDOT's goals for intercity passenger service in Michigan. Second, the intercity passenger network in Michigan is largely a function of how the services connect to the national network. Like the interstate highway system, both modes provide for intercity travel *within* Michigan, but a primary goal is to connect to national networks to provide for travel *throughout the country*. Optimizing the service for travel within Michigan, may result in lost connections to the national network. Poor connections to the national network can lead to lost ridership and lost revenues.

In addition, competition between modes and between providers can also be a barrier to coordinated planning. Indian Trails Inc., has been a vocal opponent to the level of state assistance provided for Amtrak services in the Flint to Chicago corridor which they consider to be in unfair competition with their unsubsidized intercity bus routes. Forgoing coordination within this competitive environment can be difficult.

5.2.2 Opportunities

5.2.2.1 Role for Businesses in Intercity Transportation

A structure for collaboration between intercity service providers and businesses in markets dependent on (or sensitive to) intercity service may trigger enhanced markets for tourism, social, and recreational services. The same type of collaboration may enhance services and access to family travelers in the market for services associated with traveling for family visits or obligations. Such collaboration may result in complementary marketing and operations of intercity services with other amenities for pleasure and family-oriented travelers. This type of collaboration may involve charters and private tourism services, as well as the traditional intercity providers described in this report.

A collaborative structure with businesses may provide opportunities to explore intercity options for the workforce commuting in industries where access to regional labor markets is inhibited by jurisdictional limitations of transit.

5.2.2.2 Collaboration with Transit Providers

Intercity passenger services are not geared toward meeting intrastate regional travel because of their focus on connecting to the national network. However, as discussed in the *Transit Technical Report* overcoming barriers of availability and scheduling for services spanning jurisdictional boundaries has the potential to trigger economic participation in the workforce and consumer markets. The *Travel Characteristics Technical Report* also finds that in those areas where more transit services are available, the non-driving population does utilize transportation services.

Consequently, collaboration between intercity providers and transit providers regarding schedules and routes has the potential to trigger greater levels of workforce and market participation in areas where zero-vehicle households are separated from trade centers, jobs, and markets by jurisdictional boundaries.

5.2.2.3 Intercity Passenger Technologies

Section 2.3.5, *Use of Technology*, of this report has explored technologies supporting intercity passenger services. Rail technologies like the ITCS for trains may reduce travel times and costs of rail lines, offering flexibility in schedules, price, and availability cited earlier in this report. The technology also has the potential to better enable carriers to manage the mixed use of rail infrastructure (freight and passenger) cited as a potential performance barrier for rail passengers.

Online intercity bus ticketing and scheduling services make it easier for passengers to identify feasible routes and schedules to access activities by this mode.

While these technologies alone may not trigger greater economic participation by system users, they may ameliorate some of the performance barriers facing travelers dependent on these modes. They may be combined with other opportunities explored in this report to make activities more accessible by intercity rail and bus.

5.2.3 Integrating Intercity Services

Integrating intercity passenger services into Michigan's long-range planning entails identifying opportunities to improve the scheduling, flexibility, and frequency of these services. Such opportunities may be found through collaboration between intercity providers and businesses in their target markets (both consumer and labor markets supported by intercity travel), as well as between transit providers and intercity providers. The role of charter services and their accessibility to schools, churches, and businesses warrants further exploration as potential resource for activities involving intercity travel.

Local pedestrian and bicycle accessibility to intercity rail and bus stations, local transit routes complementary to intercity bus and rail services, park and ride facilities, and new developments and land uses will be important for a fully integrated transit vision for *MI Transportation Plan*. This report has explored the state of intercity passenger services in Michigan today as well as the unique markets, operational challenges, and opportunities for

integrating intercity services into an integrated transportation system supporting Michigan's economic vitality and potential in the long-term.

Appendix A - Source Data for Intercity Passenger Graphs

Figure 2: Michigan Statewide Intercity Passenger Rail Service – Ridership (FY 1995-2005)

	<i>FY 1995</i>	<i>FY 1996</i>	<i>FY 1997</i>	<i>FY 1998</i>	<i>FY 1999</i>	<i>FY 2000</i>	<i>FY 2001</i>	<i>FY 2002</i>	<i>FY 2003</i>	<i>FY 2004</i>	<i>FY 2005</i>
Pere Marquette	51410	53551	65172	65930	69859	64825	58836	60127	73392	87767	96471
Blue Water	114730	109762	123504	115334	114289	108266	105114	91714	80890	94378	111630
Wolverine	371683	375128	418491	375273	343527	320383	295227	299729	326252	366291	406499
Statewide	537823	538441	607167	556537	527675	493474	459177	451570	480534	548436	614600

Figure 3: Michigan Statewide Intercity Passenger Rail Service – Revenue (FY 1995-2005)

	<i>FY 1995</i>	<i>FY 1996</i>	<i>FY 1997</i>	<i>FY 1998</i>	<i>FY 1999</i>	<i>FY 2000</i>	<i>FY 2001</i>	<i>FY 2002</i>	<i>FY 2003</i>	<i>FY 2004</i>	<i>FY 2005</i>
Pere Marquette	1,233,846	1,334,245	1,563,421	1,529,554	1,670,048	1,743,864	1,701,941	1,603,958	1,677,649	1,935,629	2,144,449
Blue Water	2,925,987	2,891,674	3,085,424	2,914,009	2,891,987	3,001,760	2,995,798	2,774,186	2,068,498	2,278,963	2,757,083
Wolverine	8,546,106	9,024,612	9,420,344	9,211,381	8,544,990	9,312,260	8,831,964	9,695,518	9,118,375	10,123,787	11,751,219
Statewide	12,705,939	13,250,531	14,069,189	13,654,944	13,107,025	14,057,884	13,529,703	14,073,662	12,864,522	14,338,379	16,652,751

Figure 4: Michigan Statewide Intercity Passenger Rail Service – Station Activity (FY 1995-2005)

	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Albion	1,973	1,928	2,030	1,848	1,813	1,584	1,261	963	896	1,021	1,681
Ann Arbor	98,983	100,942	114,444	103,395	95,279	91,622	87,305	88,620	91,504	106,353	124,473
Bangor	1,556	1,867	2,358	2,258	2,401	2,134	2,030	1,972	2,021	2,599	3,219
Battle Creek	46,453	50,096	57,112	57,286	54,659	48,860	44,691	37,842	41,257	43,129	46,837
St. Joseph	5,587	5,782	6,756	6,458	6,883	6,312	5,915	5,241	6,077	6,855	8,054
Birmingham	17,143	17,078	17,384	10,869	9,594	8,954	7,695	9,412	10,992	15,822	18,153
Dearborn	80,221	76,645	75,888	70,008	59,736	54,553	51,287	51,371	55,869	64,272	67,296
Detroit	74,666	67,949	71,673	65,029	56,869	46,765	45,741	47,875	50,202	52,774	55,794
Dowagiac	1,982	1,585	1,836	1,714	1,576	1,187	1,124	1,368	1,628	1,936	2,033
Durand	4,615	4,293	4,763	4,613	4,326	3,678	3,887	3,357	3,131	4,445	6,679
East Lansing	32,909	30,721	33,767	33,622	31,469	28,649	26,633	24,185	21,914	30,104	38,674
Flint	21,797	21,424	23,199	21,809	21,303	16,793	15,234	13,596	10,864	15,274	21,270
Grand Rapids	25,508	26,363	32,401	32,520	34,237	31,204	28,729	29,951	36,643	46,168	48,498
Greenfield Village			7,317	1,669	3,858	2,306	1,190	1,179	268	576	676
Holland	18,805	18,960	23,429	23,838	25,616	23,767	21,874	21,537	26,617	29,929	33,888
Jackson	27,328	27,927	32,100	29,355	29,571	26,546	23,433	20,402	21,210	22,339	25,289
Kalamazoo	80,561	81,455	94,913	85,211	82,399	77,653	67,948	58,494	64,574	73,904	86,189
Lapeer	6,263	5,034	5,870	6,048	6,237	4,625	4,385	3,996	4,006	5,306	5,527
New Buffalo	1,065	982	1,272	1,537	1,680	1,489	1,506	1,405	1,567	1,807	1,986
Niles	27,444	25,985	29,484	26,102	24,699	22,532	20,075	16,045	14,820	16,444	17,039
Pontiac	9,433	11,100	12,724	9,541	8,456	8,085	7,286	7,549	9,961	12,579	14,356
Port Huron	26,961	16,278	20,718	18,755	12,733	10,828	11,748	10,266	6,182	8,222	9,673
Royal Oak	6	9,926	15,747	10,121	9,521	8,942	9,231	8,903	11,771	17,243	21,183
Michigan Total	611,259	604,320	687,185	623,606	584,915	529,068	490,208	465,529	493,974	579,101	658,467

Figure 6: Intercity Passenger State Subsidized Bus Route - Ridership (FY 2000 – 2005)

	<i>FY 2000</i>	<i>FY 2001</i>	<i>FY 2002</i>	<i>FY 2003</i>	<i>FY 2004</i>	<i>FY 2005</i>
Bay City to St. Ignace	10,902	11,263	10,329	10,651	10,553	10,930
Grand Rapids to St. Ignace	22,135	22,320	20,045	20,102	22,576	23,609
St. Ignace to Duluth	13,706	14,737	15,192	17,222	13,670	14,364
Calumet to Milwaukee	23,420	25,614	28,694	30,820	30,307	33,947
Marquette to Green Bay	4,549	4,417	5,035	4,842	2,843	2,373

Figure 7: Intercity Passenger State Subsidized Bus Route - Bus Miles (FY 2000 – 2005)

	<i>FY 2000</i>	<i>FY 2001</i>	<i>FY 2002</i>	<i>FY 2003</i>	<i>FY 2004</i>	<i>FY 2005</i>
Bay City to St. Ignace	182,328	181,770	181,722	180,375	180,804	180,857
Grand Rapids to St. Ignace	205,821	203,717	202,033	201,722	202,262	201,714
St. Ignace to Duluth	325,357	306,657	324,361	320,088	320,746	316,674
Calumet to Milwaukee	299,551	279,955	322,704	312,949	309,805	309,731
Marquette to Green Bay	123,142	118,677	138,918	133,653	102,704	81,732

Figure 9: History of CTF Appropriations less Revenue Adjustments (FY 1988 -2005)

<i>FY 1988</i>	<i>FY 1989</i>	<i>FY 1990</i>	<i>FY 1991</i>	<i>FY 1992</i>	<i>FY 1993</i>	<i>FY 1994</i>	<i>FY 1995</i>	<i>FY 1996</i>
\$164.7	\$137.3	\$146.4	\$146.9	\$126.3	\$126.9	\$136.0	\$142.7	\$153.1
<i>FY 1997</i>	<i>FY 1998</i>	<i>FY 1999</i>	<i>FY 2000</i>	<i>FY 2001</i>	<i>FY 2002</i>	<i>FY 2003</i>	<i>FY 2004</i>	<i>FY 2005</i>
\$158.3	\$209.4	\$196.4	\$199.1	\$219.2	\$205.7	\$207.6	\$207.5	\$191.1



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